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## CONTENTS

General .....	2969-3014
Sensation and Perception .....	3015-3033
Feeling and Emotion .....	3034-3035
Attention, Memory and Thought .....	3036-3045
Nervous System .....	3046-3052
Motor Phenomena and Action .....	3053-3073
Plant and Animal Behavior .....	3074-3085
Evolution and Heredity .....	3086-3104
Special Mental Conditions .....	3105-3149
Nervous and Mental Disorders .....	3150-3219
Social Functions of the Individual .....	3220-3265
Industrial and Personnel Problems .....	3266-3281
Childhood and Adolescence .....	3282-3294
Educational Psychology .....	3295-3329
Biometry and Statistics .....	3330
Mental Tests .....	3331-3338

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## AUTHOR INDEX

Adams, G. P., 2969  
 Adams, H., 3331  
 Adrian, E. D., 3015  
 Ajello, L., 3046  
 Akroyd, F., 3053  
 Alters, —, 3019  
 Altschul, R., 3150,  
     3151  
 Anderson, J. E., 3114  
 Angell, F., 2970  
 [Anon], 2971, 3152,  
     3153, 3206, 3282,  
     3295  
 Appell, K. E., 3154  
 Arthur, G., 3332  
 Auerbach, F., 2972  
 Bain, R., 3220  
 Bakewell, C. M., 2973  
 Barbooka, C. J., 3155  
 Barker, L. F., 3054,  
     3086  
 Barnes, H. E., 3231  
 Baron, J., 3087  
 Bathurst, J. E., 3330  
 Bekhterev, V. M., 3105,  
     3106  
 Bénabé, G., 3267  
 Bennett, E. A., 3107  
 Bénan, R., 3156  
 Benvenuti, M., 3157  
 Berman, L., 3055  
 Berneye, H. T., 3221  
 Bianchini, M. L., 3108  
 Binder, J., 2995  
 Bingham, W. V., 3277  
 Biachowski, S., 3036  
 Blank, L., 3189  
 Blanton, S., 3308  
 Bloor, C., 3037  
 Boas, G., 3222  
 Bogardus, E. S., 3223  
 Bonjour, J., 3109  
 Bordas, F., 3056  
 Bostock, J., 3158  
 Bouton, M. L., 3074  
 Bouyer, H., 3159  
 Boyle, M. E., 3088  
 Bradway, W. E., 3017  
 Briand, —, 3089  
 Brightman, E. S., 2974  
 Brown, T. G., 3057,  
     3058, 3059  
 Brownell, H. C., 3296  
 Buchholz, H., 2975  
 Bull, H. O., 3075  
 Bunch, C. C., 3016  
 Burchill, S. C., 3110  
 Bureau of Public Per-  
     sonnel Administra-  
     tion Staff, 3268,  
     3269, 3270, 3271,  
     3272, 3333  
 Burrow, T., 3111  
 Buscaino, V., 3160  
 Busquet, H., 3076  
 Buswell, G. T., 3297,  
     3298  
 Cabinet Bureau of Sta-  
     tistics, Japanese Gov-  
     ernment, 3224  
 Carpenter, E. R., 3161  
 Carreon, M. L., 3299  
 Cassierer, E., 2995  
 Cattell, J. M.C., 2976  
 Chapin, F. S., 3308  
 Chevone, L. C. F., 3162  
 Chorine, V., 3065  
 Clark, J. M., 3231  
 Claude-Joseph, Frère,  
     3077  
 Cole, L. W., 3300  
 Collier, J. W., 3301  
 Comignan, J., 3078  
 Cory, H. E., 3225  
 Courtier, J., 3056  
 Crane, G. W., 3018  
 Crist, J. W., 3090  
 Croner, E., 3283  
 Crosland, H. R., 3017  
 Crosier, W. J., 3060  
 Dam, C. H., 3226  
 Dana, C. L., 3047  
 Davis, F. A., 3163  
 Davis, J. C., 3112  
 de Angelis, E., 3151  
 Dearborn, W. F., 3334  
 DeBow, L. A., 3331  
 de Garis, C. F., 3227  
 de Laguna, G. A., 3228  
 Delbrück, H., 3164  
 Delmas, A., 3113  
 Dennison, H., 3277  
 Deutsch, E., 3038  
 Dolesal, J., 3273  
 Drake, D., 2977, 2978  
 Drake, R. L., 3197  
 Ducas, C. J., 3229  
 Dummer, E. S., [Ed.],  
     3114  
 Duniap, K., 2996  
 Duvigneaud, —, 3082  
 Edman, I., 2979  
 Elliot, T. D., 3230  
 Ellwood, C. A., 3231  
 Espé de Metz, G., 3006  
 Estiennet, —, 2980  
 Fanconi, —, 3284  
 Farnsworth, P. R., 3232  
 Farr, C. B., 3154  
 Fessard, A., 3061  
 Fettscher, R., 3091  
 Fillimonoff, I. N., 3062  
 Fishback, E. H., 3302  
 Fishbein, M., 3274  
 Fleury, M., 3165, 3166  
 Flügel, J. C., 3335  
 Follett, M. P., 3277  
 Freud, S., 3116  
 Fromm, H., 3233  
 Furniss, L., 3331  
 Galant, J. S., 3167  
 Garth, T. R., 3234,  
     3235  
 Garvey, —, 3277  
 Gault, R. H., 3018,  
     3231  
 Goddard, P. E., 3236  
 Gossuch, S. C., 3168  
 Graves, T. C., 3169  
 Gray, W. S., 3303, 3304  
 Greene, H. A., 3305  
 Gross, K., 3170  
 Grzegorzevski, M., 3306  
 Guillaume, A. C., 3171  
 Gun, W. T. J., 3092  
 Gutmann, H., 3237  
 Haas, J., 3117  
 Hackl, K., 3275  
 Hadfield, J. A., 3118  
 Haggerty, M. E., 3308  
 Halbertson, K. T. A.,  
     3019  
 Hall, M. E., 3039  
 Hall, W. W., 3040  
 Hamilton, G. V., 3238  
 Hankins, F. H., 3093  
 Harrison, J. W. H.,  
     3094, 3095  
 Hartshorne, H., 3285  
 Hartson, L. D., 3096  
 Hawley, F., 3239  
 Hay, O. P., 3240  
 Hecht, S., 3020  
 Herschan, O., 3119  
 Hertz, F., 3241  
 Herubel, M., 3028  
 Hildreth, G., 3307  
 Hirscheim - Wirtheimer,  
     I., 3120  
 Hocking, W. E., 2981,  
     2982  
 Hoff, H., 3063  
 Hollander, B., 2983  
 Horney, K., 3121  
 Hoslasson, —, 3122  
 Hudelson, E. [Ed.],  
     3308  
 Hunter, W., 3172  
 Hunter, W. S., 2984  
 Immaculata, Sister M.,  
     3309  
 Iwanowna, —, 3097  
 Jung, C. G., 3123  
 Kahle, H. K., 3175  
 Kamiat, A. H., 3124  
 Kanner, L., 3125  
 Kant, O., 3176, 3177  
 Kelley, T. L., 3336  
 Kessler, K., 2995  
 Kiesow, F., 3021  
 Klages, L., 3242  
 Klein, R., 3178  
 Klemm, O., 3276  
 Klineberg, O., 3243  
 Knudson, V. O., 3022  
 Ko, C. S., 3337  
 Kähler, W., 2985, 3079  
 Kollik, M., 3190  
 Kompanjeets, S., 2986  
 Krapf, E., 3179  
 Freud, S., 3116  
 Fromm, H., 3233  
 Furniss, L., 3331  
 Galant, J. S., 3167  
 Garth, T. R., 3234,  
     3235  
 Garvey, —, 3277  
 Gault, R. H., 3018,  
     3231  
 Goddard, P. E., 3236  
 Gossuch, S. C., 3168  
 Graves, T. C., 3169  
 Gray, W. S., 3303, 3304  
 Greene, H. A., 3305  
 Gross, K., 3170  
 Grzegorzevski, M., 3306  
 Guillaume, A. C., 3171  
 Gun, W. T. J., 3092  
 Gutmann, H., 3237  
 Haas, J., 3117  
 Hackl, K., 3275  
 Hadfield, J. A., 3118  
 Haggerty, M. E., 3308  
 Halbertson, K. T. A.,  
     3019  
 Hall, M. E., 3039  
 Hall, W. W., 3040  
 Hamilton, G. V., 3238  
 Hankins, F. H., 3093  
 Harrison, J. W. H.,  
     3094, 3095  
 Hartshorne, H., 3285  
 Hartson, L. D., 3096  
 Hawley, F., 3239  
 Hay, O. P., 3240  
 Hecht, S., 3020  
 Herschan, O., 3119  
 Hertz, F., 3241  
 Herubel, M., 3028  
 Hildreth, G., 3307  
 Hirscheim - Wirtheimer,  
     I., 3120  
 Hocking, W. E., 2981,  
     2982  
 Hoff, H., 3063  
 Hollander, B., 2983  
 Horney, K., 3121  
 Hoslasson, —, 3122  
 Hudelson, E. [Ed.],  
     3308  
 Hunter, W., 3172  
 Hunter, W. S., 2984  
 Immaculata, Sister M.,  
     3309  
 Iwanowna, —, 3097  
 Jung, C. G., 3123  
 Kahle, H. K., 3175  
 Kamiat, A. H., 3124  
 Kanner, L., 3125  
 Kant, O., 3176, 3177  
 Kelley, T. L., 3336  
 Kessler, K., 2995  
 Kiesow, F., 3021  
 Klages, L., 3242  
 Klein, R., 3178  
 Klemm, O., 3276  
 Klineberg, O., 3243  
 Knudson, V. O., 3022  
 Ko, C. S., 3337  
 Kähler, W., 2985, 3079  
 Kollik, M., 3190  
 Kompanjeets, S., 2986  
 Krapf, E., 3179  
 Freud, S., 3116  
 Fromm, H., 3233  
 Furniss, L., 3331  
 Galant, J. S., 3167  
 Garth, T. R., 3234,  
     3235  
 Garvey, —, 3277  
 Gault, R. H., 3018,  
     3231  
 Goddard, P. E., 3236  
 Gossuch, S. C., 3168  
 Graves, T. C., 3169  
 Gray, W. S., 3303, 3304  
 Greene, H. A., 3305  
 Gross, K., 3170  
 Grzegorzevski, M., 3306  
 Guillaume, A. C., 3171  
 Gun, W. T. J., 3092  
 Gutmann, H., 3237  
 Haas, J., 3117  
 Hackl, K., 3275  
 Hadfield, J. A., 3118  
 Haggerty, M. E., 3308  
 Halbertson, K. T. A.,  
     3019  
 Hall, M. E., 3039  
 Hall, W. W., 3040  
 Hamilton, G. V., 3238  
 Hankins, F. H., 3093  
 Harrison, J. W. H.,  
     3094, 3095  
 Hartshorne, H., 3285  
 Hartson, L. D., 3096  
 Hawley, F., 3239  
 Hay, O. P., 3240  
 Hecht, S., 3020  
 Herschan, O., 3119  
 Hertz, F., 3241  
 Herubel, M., 3028  
 Hildreth, G., 3307  
 Hirscheim - Wirtheimer,  
     I., 3120  
 Hocking, W. E., 2981,  
     2982  
 Hoff, H., 3063  
 Hollander, B., 2983  
 Horney, K., 3121  
 Hoslasson, —, 3122  
 Hudelson, E. [Ed.],  
     3308  
 Hunter, W., 3172  
 Hunter, W. S., 2984  
 Immaculata, Sister M.,  
     3309  
 Iwanowna, —, 3097  
 Jung, C. G., 3123  
 Kahle, H. K., 3175  
 Kamiat, A. H., 3124  
 Kanner, L., 3125  
 Kant, O., 3176, 3177  
 Kelley, T. L., 3336  
 Kessler, K., 2995  
 Kiesow, F., 3021  
 Klages, L., 3242  
 Klein, R., 3178  
 Klemm, O., 3276  
 Klineberg, O., 3243  
 Knudson, V. O., 3022  
 Ko, C. S., 3337  
 Kähler, W., 2985, 3079  
 Kollik, M., 3190  
 Kompanjeets, S., 2986  
 Krapf, E., 3179  
 Freud, S., 3116  
 Fromm, H., 3233  
 Furniss, L., 3331  
 Galant, J. S., 3167  
 Garth, T. R., 3234,  
     3235  
 Garvey, —, 3277  
 Gault, R. H., 3018,  
     3231  
 Goddard, P. E., 3236  
 Gossuch, S. C., 3168  
 Graves, T. C., 3169  
 Gray, W. S., 3303, 3304  
 Greene, H. A., 3305  
 Gross, K., 3170  
 Grzegorzevski, M., 3306  
 Guillaume, A. C., 3171  
 Gun, W. T. J., 3092  
 Gutmann, H., 3237  
 Haas, J., 3117  
 Hackl, K., 3275  
 Hadfield, J. A., 3118  
 Haggerty, M. E., 3308  
 Halbertson, K. T. A.,  
     3019  
 Hall, M. E., 3039  
 Hall, W. W., 3040  
 Hamilton, G. V., 3238  
 Hankins, F. H., 3093  
 Harrison, J. W. H.,  
     3094, 3095  
 Hartshorne, H., 3285  
 Hartson, L. D., 3096  
 Hawley, F., 3239  
 Hay, O. P., 3240  
 Hecht, S., 3020  
 Herschan, O., 3119  
 Hertz, F., 3241  
 Herubel, M., 3028  
 Hildreth, G., 3307  
 Hirscheim - Wirtheimer,  
     I., 3120  
 Hocking, W. E., 2981,  
     2982  
 Hoff, H., 3063  
 Hollander, B., 2983  
 Horney, K., 3121  
 Hoslasson, —, 3122  
 Hudelson, E. [Ed.],  
     3308  
 Hunter, W., 3172  
 Hunter, W. S., 2984  
 Immaculata, Sister M.,  
     3309  
 Iwanowna, —, 3097  
 Jung, C. G., 3123  
 Kahle, H. K., 3175  
 Kamiat, A. H., 3124  
 Kanner, L., 3125  
 Kant, O., 3176, 3177  
 Kelley, T. L., 3336  
 Kessler, K., 2995  
 Kiesow, F., 3021  
 Klages, L., 3242  
 Klein, R., 3178  
 Klemm, O., 3276  
 Klineberg, O., 3243  
 Knudson, V. O., 3022  
 Ko, C. S., 3337  
 Kähler, W., 2985, 3079  
 Kollik, M., 3190  
 Kompanjeets, S., 2986  
 Krapf, E., 3179  
 Freud, S., 3116  
 Fromm, H., 3233  
 Furniss, L., 3331  
 Galant, J. S., 3167  
 Garth, T. R., 3234,  
     3235  
 Garvey, —, 3277  
 Gault, R. H., 3018,  
     3231  
 Goddard, P. E., 3236  
 Gossuch, S. C., 3168  
 Graves, T. C., 3169  
 Gray, W. S., 3303, 3304  
 Greene, H. A., 3305  
 Gross, K., 3170  
 Grzegorzevski, M., 3306  
 Guillaume, A. C., 3171  
 Gun, W. T. J., 3092  
 Gutmann, H., 3237  
 Haas, J., 3117  
 Hackl, K., 3275  
 Hadfield, J. A., 3118  
 Haggerty, M. E., 3308  
 Halbertson, K. T. A.,  
     3019  
 Hall, M. E., 3039  
 Hall, W. W., 3040  
 Hamilton, G. V., 3238  
 Hankins, F. H., 3093  
 Harrison, J. W. H.,  
     3094, 3095  
 Hartshorne, H., 3285  
 Hartson, L. D., 3096  
 Hawley, F., 3239  
 Hay, O. P., 3240  
 Hecht, S., 3020  
 Herschan, O., 3119  
 Hertz, F., 3241  
 Herubel, M., 3028  
 Hildreth, G., 3307  
 Hirscheim - Wirtheimer,  
     I., 3120  
 Hocking, W. E., 2981,  
     2982  
 Hoff, H., 3063  
 Hollander, B., 2983  
 Horney, K., 3121  
 Hoslasson, —, 3122  
 Hudelson, E. [Ed.],  
     3308  
 Hunter, W., 3172  
 Hunter, W. S., 2984  
 Immaculata, Sister M.,  
     3309  
 Iwanowna, —, 3097  
 Jung, C. G., 3123  
 Kahle, H. K., 3175  
 Kamiat, A. H., 3124  
 Kanner, L., 3125  
 Kant, O., 3176, 3177  
 Kelley, T. L., 3336  
 Kessler, K., 2995  
 Kiesow, F., 3021  
 Klages, L., 3242  
 Klein, R., 3178  
 Klemm, O., 3276  
 Klineberg, O., 3243  
 Knudson, V. O., 3022  
 Ko, C. S., 3337  
 Kähler, W., 2985, 3079  
 Kollik, M., 3190  
 Kompanjeets, S., 2986  
 Krapf, E., 3179  
 Freud, S., 3116  
 Fromm, H., 3233  
 Furniss, L., 3331  
 Galant, J. S., 3167  
 Garth, T. R., 3234,  
     3235  
 Garvey, —, 3277  
 Gault, R. H., 3018,  
     3231  
 Goddard, P. E., 3236  
 Gossuch, S. C., 3168  
 Graves, T. C., 3169  
 Gray, W. S., 3303, 3304  
 Greene, H. A., 3305  
 Gross, K., 3170  
 Grzegorzevski, M., 3306  
 Guillaume, A. C., 3171  
 Gun, W. T. J., 3092  
 Gutmann, H., 3237  
 Haas, J., 3117  
 Hackl, K., 3275  
 Hadfield, J. A., 3118  
 Haggerty, M. E., 3308  
 Halbertson, K. T. A.,  
     3019  
 Hall, M. E., 3039  
 Hall, W. W., 3040  
 Hamilton, G. V., 3238  
 Hankins, F. H., 3093  
 Harrison, J. W. H.,  
     3094, 3095  
 Hartshorne, H., 3285  
 Hartson, L. D., 3096  
 Hawley, F., 3239  
 Hay, O. P., 3240  
 Hecht, S., 3020  
 Herschan, O., 3119  
 Hertz, F., 3241  
 Herubel, M., 3028  
 Hildreth, G., 3307  
 Hirscheim - Wirtheimer,  
     I., 3120  
 Hocking, W. E., 2981,  
     2982  
 Hoff, H., 3063  
 Hollander, B., 2983  
 Horney, K., 3121  
 Hoslasson, —, 3122  
 Hudelson, E. [Ed.],  
     3308  
 Hunter, W., 3172  
 Hunter, W. S., 2984  
 Immaculata, Sister M.,  
     3309  
 Iwanowna, —, 3097  
 Jung, C. G., 3123  
 Kahle, H. K., 3175  
 Kamiat, A. H., 3124  
 Kanner, L., 3125  
 Kant, O., 3176, 3177  
 Kelley, T. L., 3336  
 Kessler, K., 2995  
 Kiesow, F., 3021  
 Klages, L., 3242  
 Klein, R., 3178  
 Klemm, O., 3276  
 Klineberg, O., 3243  
 Knudson, V. O., 3022  
 Ko, C. S., 3337  
 Kähler, W., 2985, 3079  
 Kollik, M., 3190  
 Kompanjeets, S., 2986  
 Krapf, E., 3179  
 Freud, S., 3116  
 Fromm, H., 3233  
 Furniss, L., 3331  
 Galant, J. S., 3167  
 Garth, T. R., 3234,  
     3235  
 Garvey, —, 3277  
 Gault, R. H., 3018,  
     3231  
 Goddard, P. E., 3236  
 Gossuch, S. C., 3168  
 Graves, T. C., 3169  
 Gray, W. S., 3303, 3304  
 Greene, H. A., 3305  
 Gross, K., 3170  
 Grzegorzevski, M., 3306  
 Guillaume, A. C., 3171  
 Gun, W. T. J., 3092  
 Gutmann, H., 3237  
 Haas, J., 3117  
 Hackl, K., 3275  
 Hadfield, J. A., 3118  
 Haggerty, M. E., 3308  
 Halbertson, K. T. A.,  
     3019  
 Hall, M. E., 3039  
 Hall, W. W., 3040  
 Hamilton, G. V., 3238  
 Hankins, F. H., 3093  
 Harrison, J. W. H.,  
     3094, 3095  
 Hartshorne, H., 3285  
 Hartson, L. D., 3096  
 Hawley, F., 3239  
 Hay, O. P., 3240  
 Hecht, S., 3020  
 Herschan, O., 3119  
 Hertz, F., 3241  
 Herubel, M., 3028  
 Hildreth, G., 3307  
 Hirscheim - Wirtheimer,  
     I., 3120  
 Hocking, W. E., 2981,  
     2982  
 Hoff, H., 3063  
 Hollander, B., 2983  
 Horney, K., 3121  
 Hoslasson, —, 3122  
 Hudelson, E. [Ed.],  
     3308  
 Hunter, W., 3172  
 Hunter, W. S., 2984  
 Immaculata, Sister M.,  
     3309  
 Iwanowna, —, 3097  
 Jung, C. G., 3123  
 Kahle, H. K., 3175  
 Kamiat, A. H., 3124  
 Kanner, L., 3125  
 Kant, O., 3176, 3177  
 Kelley, T. L., 3336  
 Kessler, K., 2995  
 Kiesow, F., 3021  
 Klages, L., 3242  
 Klein, R., 3178  
 Klemm, O., 3276  
 Klineberg, O., 3243  
 Knudson, V. O., 3022  
 Ko, C. S., 3337  
 Kähler, W., 2985, 3079  
 Kollik, M., 3190  
 Kompanjeets, S., 2986  
 Krapf, E., 3179  
 Freud, S., 3116  
 Fromm, H., 3233  
 Furniss, L., 3331  
 Galant, J. S., 3167  
 Garth, T. R., 3234,  
     3235  
 Garvey, —, 3277  
 Gault, R. H., 3018,  
     3231  
 Goddard, P. E., 3236  
 Gossuch, S. C., 3168  
 Graves, T. C., 3169  
 Gray, W. S., 3303, 3304  
 Greene, H. A., 3305  
 Gross, K., 3170  
 Grzegorzevski, M., 3306  
 Guillaume, A. C., 3171  
 Gun, W. T. J., 3092  
 Gutmann, H., 3237  
 Haas, J., 3117  
 Hackl, K., 3275  
 Hadfield, J. A., 3118  
 Haggerty, M. E., 3308  
 Halbertson, K. T. A.,  
     3019  
 Hall, M. E., 3039  
 Hall, W. W., 3040  
 Hamilton, G. V., 3238  
 Hankins, F. H., 3093  
 Harrison, J. W. H.,  
     3094, 3095  
 Hartshorne, H., 3285  
 Hartson, L. D., 3096  
 Hawley, F., 3239  
 Hay, O. P., 3240  
 Hecht, S., 3020  
 Herschan, O., 3119  
 Hertz, F., 3241  
 Herubel, M., 3028  
 Hildreth, G., 3307  
 Hirscheim - Wirtheimer,  
     I., 3120  
 Hocking, W. E., 2981,  
     2982  
 Hoff, H., 3063  
 Hollander, B., 2983  
 Horney, K., 3121  
 Hoslasson, —, 3122  
 Hudelson, E. [Ed.],  
     3308  
 Hunter, W., 3172  
 Hunter, W. S., 2984  
 Immaculata, Sister M.,  
     3309  
 Iwanowna, —, 3097  
 Jung, C. G., 3123  
 Kahle, H. K., 3175  
 Kamiat, A. H., 3124  
 Kanner, L., 3125  
 Kant, O., 3176, 3177  
 Kelley, T. L., 3336  
 Kessler, K., 2995  
 Kiesow, F., 3021  
 Klages, L., 3242  
 Klein, R., 3178  
 Klemm, O., 3276  
 Klineberg, O., 3243  
 Knudson, V. O., 3022  
 Ko, C. S., 3337  
 Kähler, W., 2985, 3079  
 Kollik, M., 3190  
 Kompanjeets, S., 2986  
 Krapf, E., 3179  
 Freud, S., 3116  
 Fromm, H., 3233  
 Furniss, L., 3331  
 Galant, J. S., 3167  
 Garth, T. R., 3234,  
     3235  
 Garvey, —, 3277  
 Gault, R. H., 3018,  
     3231  
 Goddard, P. E., 3236  
 Gossuch, S. C., 3168  
 Graves, T. C., 3169  
 Gray, W. S., 3303, 3304  
 Greene, H. A., 3305  
 Gross, K., 3170  
 Grzegorzevski, M., 3306  
 Guillaume, A. C., 3171  
 Gun, W. T. J., 3092  
 Gutmann, H., 3237  
 Haas, J., 3117  
 Hackl, K., 3275  
 Hadfield, J. A., 3118  
 Haggerty, M. E., 3308  
 Halbertson, K. T. A.,  
     3019  
 Hall, M. E., 3039  
 Hall, W. W., 3040  
 Hamilton, G. V., 3238  
 Hankins, F. H., 3093  
 Harrison, J. W. H.,  
     3094, 3095  
 Hartshorne, H., 3285  
 Hartson, L. D., 3096  
 Hawley, F., 3239  
 Hay, O. P., 3240  
 Hecht, S., 3020  
 Herschan, O., 3119  
 Hertz, F., 3241  
 Herubel, M., 3028  
 Hildreth, G., 3307  
 Hirscheim - Wirtheimer,  
     I., 3120  
 Hocking, W. E., 2981,  
     2982  
 Hoff, H., 3063  
 Hollander, B., 2983  
 Horney, K., 3121  
 Hoslasson, —, 3122  
 Hudelson, E. [Ed.],  
     3308  
 Hunter, W., 3172  
 Hunter, W. S., 2984  
 Immaculata, Sister M.,  
     3309  
 Iwanowna, —, 3097  
 Jung, C. G., 3123  
 Kahle, H. K., 3175  
 Kamiat, A. H., 3124  
 Kanner, L., 3125  
 Kant, O., 3176, 3177  
 Kelley, T. L., 3336  
 Kessler, K., 2995  
 Kiesow, F., 3021  
 Klages, L., 3242  
 Klein, R., 3178  
 Klemm, O., 3276  
 Klineberg, O., 3243  
 Knudson, V. O., 3022  
 Ko, C. S., 3337  
 Kähler, W., 2985, 3079  
 Kollik, M., 3190  
 Kompanjeets, S., 2986  
 Krapf, E., 3179  
 Freud, S., 3116  
 Fromm, H., 3233  
 Furniss, L., 3331  
 Galant, J. S., 3167  
 Garth, T. R., 3234,  
     3235  
 Garvey, —, 3277  
 Gault, R. H., 3018,  
     3231  
 Goddard, P. E., 3236  
 Gossuch, S. C., 3168  
 Graves, T. C., 3169  
 Gray, W. S., 3303, 3304  
 Greene, H. A., 3305  
 Gross, K., 3170  
 Grzegorzevski, M., 3306  
 Guillaume, A. C., 3171  
 Gun, W. T. J., 3092  
 Gutmann, H., 3237  
 Haas, J., 3117  
 Hackl, K., 3275  
 Hadfield, J. A., 3118  
 Haggerty, M. E., 3308  
 Halbertson, K. T. A.,  
     3019  
 Hall, M. E., 3039  
 Hall, W. W., 3040  
 Hamilton, G. V., 3238  
 Hankins, F. H., 3093  
 Harrison, J. W. H.,  
     3094, 3095  
 Hartshorne, H., 3285  
 Hartson, L. D., 3096  
 Hawley, F., 3239  
 Hay, O. P., 3240  
 Hecht, S., 3020  
 Herschan, O., 3119  
 Hertz, F., 3241  
 Herubel, M., 3028  
 Hildreth, G., 3307  
 Hirscheim - Wirtheimer,  
     I., 3120  
 Hocking, W. E., 2981,  
     2982  
 Hoff, H., 3063  
 Hollander, B., 2983  
 Horney, K., 3121  
 Hoslasson, —, 3122  
 Hudelson, E. [Ed.],  
     3308  
 Hunter, W., 3172  
 Hunter, W. S., 2984  
 Immaculata, Sister M.,  
     3309  
 Iwanowna, —, 3097  
 Jung, C. G., 3123  
 Kahle, H. K., 3175  
 Kamiat, A. H., 3124  
 Kanner, L., 3125  
 Kant, O., 3176, 3177  
 Kelley, T. L., 3336  
 Kessler, K., 2995  
 Kiesow, F., 3021  
 Klages, L., 3242  
 Klein, R., 3178  
 Klemm, O., 3276  
 Klineberg, O., 3243  
 Knudson, V. O., 3022  
 Ko, C. S., 3337  
 Kähler, W., 2985, 3079  
 Kollik, M., 3190  
 Kompanjeets, S., 2986  
 Krapf, E., 3179  
 Freud, S., 3116  
 Fromm, H., 3233  
 Furniss, L., 3331  
 Galant, J. S., 3167  
 Garth, T. R., 3234,  
     3235  
 Garvey, —, 3277  
 Gault, R. H., 3018,  
     3231  
 Goddard, P. E., 3236  
 Gossuch, S. C., 3168  
 Graves, T. C., 3169  
 Gray, W. S., 3303, 3304  
 Greene, H. A., 3305  
 Gross, K., 3170  
 Grzegorzevski, M., 3306  
 Guillaume, A. C., 3171  
 Gun, W. T. J., 3092  
 Gutmann, H., 3237  
 Haas, J., 3117  
 Hackl, K., 3275  
 Hadfield, J. A., 3118  
 Haggerty, M. E., 3308  
 Halbertson, K. T. A.,  
     3019  
 Hall, M. E., 3039  
 Hall, W. W., 3040  
 Hamilton, G. V., 3238  
 Hankins, F. H., 3093  
 Harrison, J. W. H.,  
     3094, 3095  
 Hartshorne, H., 3285  
 Hartson, L. D., 3096  
 Hawley, F., 3239  
 Hay, O. P., 3240

# PSYCHOLOGICAL ABSTRACTS

VOL. II, No. 11

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## GENERAL

2969. Adams, G. P. **Immediacy and meaning.** *Phil. Rev.*, 1928, 37, 109-132.—Conscious experience never exhibits pure immediacy, but always involves a fabric of meanings.—*A. P. Brogan* (Texas).

2970. Angell, F. **Titchener at Leipzig.** *J. Gen. Psychol.*, 1928, 1, 195-198.—Reminiscences of Titchener's personal characteristics when he was a student at Leipzig. His powers of endurance, quiet manner, spirit of loyalty and responsibility when cooperating in psychological research, ability to do efficient work, speed of reading, dislike of sentimentality, contempt for shame, general gifts and breadth of culture are described. Photograph of Titchener.—*H. Cason* (Rochester).

2971. [Anon.] **Index of the Philosophical Review, Volumes 1-35 (1892-1926).** New York: Longmans, 1928. \$3.00.—*A. P. Brogan* (Texas).

2972. Auerbach, F. **Beschreibung und Erklärung. Erster Teil: Die einfachste und vollständigste Naturbeschreibung.** (Description and explanation. First part: The simplest and the most complete description of nature.) *Scientia*, 1928, 43, 1-7.—The distinction between description and explanation is artificial. The desideratum for science is not so much a causal explanation as a description which is at once the most simple and the most complete, as Newton's law is. The simplest method for such a description is not that of words but that of formulae.—*R. G. Sherwood* (Stillwater, Minn.).

2973. Bakewell, C. M. **Harry Norman Gardner.** *Phil. Rev.*, 1928, 37, 203-209.—An account of the life and work of Professor Gardner, with reference to his important studies in the history of affective psychology among the Greeks.—*A. P. Brogan* (Texas).

2974. Brightman, E. S. **A philosophy of ideals.** New York: Holt, 1928. Pp. x + 243. \$2.00.—All agree that ideals are useful. Many current realistic and pragmatic philosophies hold that experience and nature are brute facts, having nothing ideal in them, although ideals may be used as tools for the mastery of a nature which cares nothing about them. Opposing this view, the author maintains that experience and nature are, in some sense, actually ideal systems, and thus ideals are a revelation of the very structure of the real world beyond man. The present moment of consciousness is the only immediate datum. Memory, reason, and purpose unite it to past and future perspectives which give it a meaning by relating it to the mind as a whole. Nature is nothing more than actual or possible experience of minds. My mind faces an environment which is not my mind; but that environment is other mind. An ideal is a general concept of a type of experience which we approve. Mind and nature, although not now ideal, are embodiments of ideals, and through ideals alone can experience be theoretically understood or practically controlled. The authority of ideals rests on personality—reasonable, loving personality loyal to the ideal of a shared perfection of all persons. Ideals reveal reality which is permanent and dependable and beyond man. Those thinkers who most emphatically reject idealism nevertheless, in one way or another, reassert its cardinal principle. They build their views of reality on a fraction of experience only, accepting sense experience

but neglecting experience of ideals. Materialistic views leave the very existence of ideals, even as imaginations, a mystery. Idealism interprets acceptably the datum that we experience. Idealism must continually reinterpret itself and its world to every new generation. In furtherance of this aim, two final chapters survey idealism as a contemporary philosophy, and the tasks confronting contemporary idealism.—*E. B. Delabarre* (Brown).

2975. **Buchholz, H.** *Das Problem der Kontinuität. Die Unmöglichkeit absoluter metrischer Präzision und die erkenntnistheoretischen Konsequenzen dieser Unmöglichkeit.* (The problem of continuity. The impossibility of absolute precision in measurement, and the epistemological consequences of this impossibility.) *Grenzfrag. d. Phil. d. "Neuen Psychol. Studien,"* 3, No. 1. Pp. 133. 7.50 M.—Since the *Neue Psychologische Studien* did not begin to appear until 1926, we shall briefly review Bde. I and II as an introduction to our review of Bd. III. Bd. I aims to throw more light upon the "Complex qualities, configurations (*Gestalten*) and feelings," this being its main title. It contains experimental contributions from the Leipzig Psychological Institute concerning the theory of the "wholeness" of mental phenomena, of the forms of articulation of the whole of experience and the functional relations between it and its parts, and the theory of the feelings. One general conclusion is, that the configurational impressions and likewise the feelings are only special kinds of complex qualities, and therefore totality experiences, as especially Krueger himself states in his Introduction concerning "Mental wholeness" in Heft 1. Bd. II aims to establish more precisely, from the purely psychological viewpoint, the fundamental concepts of psychophysiological optics, under the title "Light and color." It is edited by Krueger and A. Kirschmann. New observations are to be found especially in articles no. 2, 5, 6 and 8. The two contributions in Heft 1 of Bd. III constitute a critique of the assumptions, old and new, of mathematical and scientific thinking. Especially the questions regarding the nature of interrelation and of infinity are considered and answered from new points of view. A relation, in conformity with the customary definitions of continuity, is said to be the summative-combining, in quantities free from lacunae; but such a relation does not exist, and is absolutely unthinkable. A quantitative infinity is equally non-existent. There is—even in thought, in spite of Cantor—neither a continuum nor an infinity consisting of an endless addition of absolutely precise positions or numbers, given as elements beforehand; there is only a continuum of essentially opposite character, which is tantamount to temporarily, utterly, elementary, completely unsegmented wholeness. There is only an infinity which is remainderless closeness, absolute totality. These results were arrived at essentially by logical and psychological-epistemological study of some of the foundations of the prevailing method of thought. The insight attained calls us back out of logical blind-alleys, and shows us the starting points of ways which, though hitherto strange to mathematico-scientific thought, lead out from crisis and stagnation. In the methodology of the natural sciences it has been assumed heretofore that the only scientific procedure is the discrimination, separation and summation of structures which remain isolated. This one-sidedness has led to irrevocable contradictions, patched up by interconnections. The results of the new psychology and epistemology protect us from such contradictions. These results have to do chiefly with the intrinsic significance of the whole, and its priority over the parts belonging to it. It cannot be doubted that precisely these phenomena characterize the primary certainty which constitutes the sole assumptionless material of all the sciences.—*H. Buchholz* (Leipzig).

2976. **Cattell, J. McK.** *Early psychological laboratories.* *Science*, 1928. 67, 543-548.—An account is given of the conditions leading to the opening of Wundt's laboratory at Leipzig and of the American laboratories which followed it.—*G. J. Rich* (Bellevue Hospital).

2977. **Drake, D.** **That elusive doctrine of essence.** *Phil. Rev.*, 1928, 37, 52-71.—*A. P. Brogan* (Texas).

2978. **Drake, D.** **Once more as to the status of data.** *J. Phil.*, 1928, 25, 186-190.—A continuation of the argument of critical realism that data are essences.—*A. P. Brogan* (Texas).

2979. **Edman, I.** **From experience to nature.** *J. Phil.*, 1928, 25, 85-96.—Nature, as the mechanist conceives it, seems to be simply an elaborate intellectual structure invented for convenience by the troubled human animal living in a precarious changing world. On the other hand, solipsism and transcendentalism have been escapes from the pressure of the logic of fact to the suasion of the logic of phantasy. The aim of metaphysics is to explore not only the constitution that nature happens to have, but what any system of nature would have to be in order to be at all.—*A. P. Brogan* (Texas).

2980. **Estienny, —.** **Unité de l'esprit. Le sens cérébral (fonction prismatique du cerveau.)** (Mental unity. The cerebral sense [the prismatic function of the brain].) Paris: Baillière, 1928. Pp. 125.—(Preface by Voivnel.) The author submits that there is a unity of the mind, that science and art are not two poles directing human activity. Science, which lies in the realm of intelligence, does not differ in nature from art, which appeals to sensibility. The latter is one form of intelligence applied to the ego, which is only a container, the contents being but the ensemble of our perception of the outer world. The author next considers the operations of the mind or thought, inspiration, reason, error, intelligence and memory. No bibliography.—*Math. H. Piéron* (Sorbonne).

2981. **Hocking, W. E.** **The self: its body and freedom.** New Haven: Yale Univ. Press, 1928. Pp. xi + 178. \$2.00.—In a literary and often figurative style the author argues that the self, or the mind, is a system of purposes. Brief arguments on time, space and meaning are given to show that behaviorist conceptions are inadequate. A body is required for the existence of a self: "... mind requires matter for its own life . . . body and matter are somehow derived from its life." But dualism is mistaken: the body is "a part of the self" or "an organ of the self." All selves and all nature are presumably the embodiment of an inclusive will. Events are produced by purposes: the regularities of nature are the expression of constant purposes; but there is indeterminism, and human selves are free in expressing their individual purposes. The author suggests that after death some selves may "entertain" other bodies, for society in another space.—*C. H. Toll* (Amherst).

2982. **Hocking, W. E.** **What does philosophy say?** *Phil. Rev.*, 1928, 37, 133-155.—An attempt to state a core of unity among different philosophies.—*A. P. Brogan* (Texas).

2983. **Hollander, B.** **The centenary of Francis Joseph Gall.** *Med. Press*, 1928, 126, (no. 5) 7-10.—This paper gives a recapitulation of the achievements of Francis Joseph Gall, who devoted his whole life disinterestedly to the discovery of the structure and the function of the brain. Among a great many others the following contributions are pointed out: Gall was the first (1) to describe the comparative anatomy of the cerebral structure in different classes of animals, (2) to describe the formation and the development of the brain in the human foetus, (3) to unfold the convolutions of the brain, to demonstrate the white matter of the brain to be fibrous in structure, to trace the nerve fibers from the spinal cord to the cortex, etc., (4) to mark off localization in the brain, to locate the center for articulate speech and describe various forms of aphasia, (5) to point out that "mind" cannot be comprehended without a study of its development and a comparison of animal and human dispositions, etc.—*P. H. Ewert* (Clark).

2984. **Hunter, W. S. Human behavior.** Chicago: Univ. Chicago Press, 1928. Pp. x + 355. \$2.00.—This text is a complete revision of the author's *General Psychology*; in it all the problems formerly stated in terms of conscious processes (an approach which the author is now convinced is invalid) are treated from a strictly objective, behavioristic point of view. This objective study of behavior without implications of the psychic Hunter calls anthroponomy. The most characteristically anthroponomical problems are (1) the ontogenesis and use of forms of behavior, (2) those stimulus-response situations which condition language responses, (3) the analysis of behavior samples with a view to the prediction of general and special performance, and (4) problems of interstimulation and response. The fields include (1) phylogenetic anthroponomy, (2) individual and applied anthroponomy, (3) abnormal anthroponomy, (4) social and racial anthroponomy, and (5) normal adult anthroponomy. Part I treats of the first four of these fields. Part II deals with normal adult anthroponomy: *The Nervous System, Unlearned Behavior, Receptor Processes, Habit, Correlation of Stimulus and Response, and Thinking*, "a sequence of behavior controlled by the language, symbolic, processes of the subject doing the thinking." A list of references follows each chapter. Author and subject indexes conclude the book.—*L. M. Harden* (Clark).

2985. **Köhler, W. Zur Gestalttheorie. Antwort auf Herrn Rignano's Kritik.** (The *Gestalt* theory. Reply to Rignano's criticism.) *Scientia*, 1928, 43, 309-322.—In the reply that Köhler was requested to make to Rignano's articles on the *Gestalt*, Köhler says that unfamiliarity with the proper meanings of the words *Gestalt* and *Sinn* is responsible for some of the confusion of Rignano with regard to this theory. Another difficulty is that Rignano insists upon trying to compare the *Gestalt* theory with his own, based upon autonomic sensations, which do not exist for the Gestaltist. Several criticisms are specifically answered.—*R. G. Sherwood* (Stillwater, Minn.).

2986. **Kompanejetz, S. Über eine Modifikation meines Apparates zur Messung der Gegenrollung der Augen bei Kopfnieigung in der frontalen Ebene.** (A modification of my apparatus for the measurement of the counter-torsion of the eyes in the inclination of the head in the frontal plane.) *Arch. f. Ohrenheilk.*, 1927, 117, 55-61.—In order to be able to decide on the theories of F. H. Quix on the one hand and T. Magnus and A. de Kleyn on the other, in reference to stimulation of the otoliths, the author has so modified his apparatus, presented in 1913, that by means of direction of the subject's head in different planes in a horizontal position, one of the maculae saccularum is moved and the rolling of the eyes is thus determined. The author sides with Magnus and Kleyn against Quix, that the maximal stimulation occurs through the pull of the hanging otolith upon the sensitive hairs and not through pressure.—*W. Wirth* (Leipzig).

2987. **MacKinnon, F. I. Behaviorism and metaphysics.** *J. Phil.*, 1928, 25, 353-356.—Psychology has not yet criticized its traditional assumptions as adequately as physics is doing. Behaviorism in common with other recent doctrines, has protested against the old atomistic conception of man. It differs from other recent theories in rejecting the Cartesian dualism of body and mind. In this rejection of dualism and in its practical outcome, behaviorism is strikingly like the idealism of Berkeley.—*A. P. Brogan* (Texas).

2988. **Manuel, H. T. How shall we use the term "mind"?** *J. Gen. Psychol.*, 1928, 1, 384-385.—We should either use the word mind to refer to the organic basis of mental activity or we should not use it at all.—*H. Cason* (Rochester).

2989. **Marston, W. M. Materialism, vitalism and psychology.** *Psyche*, 1928, 8, 15-34.—Psychologists making laboratory studies simultaneously with the introspective and the objective method are usually interested equally in the mechanistic side and the vitalistic side of the matter. In so far as test results reveal

existence of conscious tendencies they may be said to be looking for causes of the vitalistic type. Regardless of their professions to the contrary, Watsonian behaviorists are found to be interested in vitalistic-type causation. Psychoanalysts are especially concerned with the interrelation between mechanistic-type and vitalistic-type causation. The latter are more explicit in the recognition of the simultaneous existence of the two types than any other group of investigators.

—T. R. Garth (Denver).

2990. Metz, A. *Le système philosophique des hommes d'action. Le réalisme.* (The philosophical system of men of action. Realism.) *Psychol. et vie*, 1928, 2, 83-86.—The man of action reconciles idealism and realism, and it is that which permits him to be a realist.—*Math. H. Piéron* (Sorbonne).

2991. Miles, W. *Titchener film.* *J. Gen. Psychol.*, 1928, 1, 368.—Copies of about 50 ft. of Eastman Ciné-Kodak film, showing the late Professor Titchener, taken Apr. 19, 1927, can be obtained from Miles at cost (\$3.00).—*H. Cason* (Rochester).

2992. Miles, W. *The hand centrifuge color-mixer.* *J. Gen. Psychol.*, 1928, 1, 374.—The head carrying the support for the tubes of a hand centrifuge is removed, and on the main shaft in its place a disc clamp is fastened. 1 figure.—*H. Cason* (Rochester).

2993. Miles, W. *A rotary motility test.* *J. Gen. Psychol.*, 1928, 1, 374-377.—An apparatus suitable for a turning test is made out of a small hand drill and a Veeder counter. Average results obtained by R. H. Seashore are given. 1 figure.—*H. Cason* (Rochester).

2994. Money-Kyrle, R. *The psycho-physical apparatus; an introduction to a physical interpretation of psycho-analytic theory.* *Brit. J. Med. Psychol.*, 1928, 8, 132-142.—The physical functioning of the organism is conceived in terms of the avoidance or removal of stimuli, including irrelevant and pernicious avoidances (in which the threat evoking the avoidance is an accidental antecedent of the avoided stimulus, and in which a means to satisfaction is inadvertently avoided). The neural correlate of the conscious system is conceived as within that of the unconscious, and as bearing toward it approximately the relation borne by the latter to the external world. Hallucination is the ideal reproduction of the means to satisfaction; repression is avoidance of external-system stimuli by the internal system, accomplished through the deflection of energy to other paths.—*R. R. Willoughby* (Clark).

2995. Moog, W. [Ed.] *Jahrbücher der Philosophie, begründet von M. Frischeisen-Köhler. Eine kritische Uebersicht der Philosophie der Gegenwart.* (Yearbooks of philosophy, founded by M. Frischeisen-Köhler. A critical review of contemporary philosophy. (3d annual vol.) Berlin: 1927. Pp. 362.—Contents: Paul Mentzer, "Metaphysics"; Ernst Cassirer, "Epistemology with problems in the related fields of logic and the psychology of thought"; Erich Jänsch, "Psychology in Germany and the internal lines of direction in its work of investigation"; Kurt Kessler, "Philosophy of religion"; Theodor Ziehen, "Philosophy of nature"; George Mehlis, "Philosophy of history and culture"; Julius Binder, "Newer movements in the philosophy of law and the state"; Alfred Vierkandt, "Philosophy of society"; Emil Utitz, "Aesthetics and the philosophy of art." The papers on ethics, pedagogy and the philosophy of organic nature are reserved for the next volume. According to Moog a new epoch has begun today in the philosophy of thought in which psychology as well is once more completely bound up with philosophical problems. A study of the papers reveals particularly an inclination toward the irrational; then throughout a disposition to conceive occurrence and fact in structural association and to understand in this their significance, and emphasis that the mind is a law unto itself in the face of everything investigable only in a causal-inductive manner, a defec-

tion from positivism and rationalism. In aesthetics the change from "psychologism" has been in favor of an objectivistic manner of consideration. Wölfflin has here exerted the strongest influence in recent years. In metaphysics and epistemology there is more aspiration than accomplishment, above all no uniformity of results whatever can be observed. With every author one must change one's point of consideration, but their thoughts are not markedly foreign to one another. In the paper on psychology, Jänsch testifies that the most modern tendencies in psychology are characterized by a particularly strong effort toward agreement and cooperation in the field; he gives as a result of his own experience in his work, a few criticisms of an outsider. The experimental and synthetic react upon each other so fruitfully today that one can speak historically of a second springtime in psychology. There is also displayed in everything in this connection a turn to sensory evaluation of actuality and a conscious directive aim for philosophy. The study of life demands, now that the purity of a rigorous empirical method is a more established possession, its influence for the first time upon the philosophical view of the world. Psychology has many individual problems in common with the study of life (psychophysiology and developmental psychology). In this connection structural psychology and *Gestalt* psychology, the study of personality and types, have a wide field of inquiry. This and the psychology of the study of values are in the center of interest today. "The exploration of the senses" is in the mind of psychology "its greatest production, but also the task of suggesting lines of direction for human activity and thought."—H. Jancke (Bonn).

2996. **Moore, J. S., & Dunlap, K.** **Discussion: consciousness, the unconscious, and mysticism.** *Phil. Rev.*, 1928, 37, 72-74.—Critical notes about real mysticism and pseudo-mysticism, and the different meanings of the unconscious.—A. P. Brogan (Texas).

2997. **Pillsbury, W. B.** **The psychology of Edward Bradford Titchener.** *Phil. Rev.*, 1928, 37, 95-108.—An account of Titchener's life, publications and teaching.—A. P. Brogan (Texas).

2998. **Ratner, J.** **The philosophy of John Dewey.** New York: Holt, 1928. Pp. xii + 560. \$4.00 (students ed., \$3.25).—A selection from Dewey's writings, arranged in such a way as to present his philosophy systematically and without polemic or other secondary material. Extensive quotations are made from *Experience and Nature*; others are from *Body and Mind*, *Journal of Philosophy* contributions, "Does Reality Possess Practical Character?" (from *Essays in Honor of William James*), *The Public and its Problems*, *Essays in Experimental Logic*, *Reconstruction in Philosophy*, *How We Think*, *Influence of Darwin on Philosophy and Other Essays*, *Creative Intelligence*, *Democracy and Education*, *Human Nature and Conduct*, and others.—R. R. Willoughby (Clark).

2999. **Ray, M. B.** **Life energy.** *Psyche*, 1928, 8, 51-59.—The writer postulates a life energy coming entirely from the sun, which is something of an electric disturbance. It is to be regarded as separate from the conception of a spirit or entelechy. The energy here described produces impulses resident in protoplasm, and it is subjective, since it places autonomous subjects in the world. Consciousness *via* sense organs is only a manifestation of the energy. A thought is to be considered substantial, just as is its object.—T. R. Garth (Denver).

3000. **Reiser, O.** **Light, wave-mechanics, and consciousness.** *J. Phil.*, 1928, 25, 309-317.—The doctrine of Christine Ladd-Franklin, that nerve fiber emits physical light, raises difficulties which can be solved by the theory that the physiological condition of the conscious experience of light and the light itself as consciously experienced are one and the same thing. Recent theories of matter suggest the possibility that mind is the functional unity of the body, where body is the fairly stable system of repeating wave patterns.—A. P. Brogan (Texas).

3001. **Reiser, O. L. Behaviorism and gestalt-psychology.** *Psyche*, 1928, **8**, 60-62.—Psychologists often tend to make a difference between their own psychology and that of others. If the behaviorists are willing to make a concession and the gestaltists are likewise disposed then the two can be made to harmonize. Behaviorists, Watson particularly, grant that all patterns are equally probable, but if they will grant that some are more probable than others one difference between the two schools will disappear. Both schools endeavor to reduce organic response to terms of physical process. If the two can agree on the extension of the term pattern they will find much in common. The gestaltists make use of introspection and the behaviorists refuse to use it as a method though they do not refuse to use the verbal report. Now if the gestaltist will grant that introspection is a brain pattern, reducing to configurations, another large difference will be resolved. The writer insists that introspection is a sort of neural photography.—*T. R. Garth* (Denver).

3002. **Rignano, E. La theorie psychologique de la forme.** (The psychological theory of form.) *Rev. phil.*, 1928, **53**, 33-49.—The article consists of a critique of the *Gestalt* theory. In the first place sensory elements are considered as having qualitative autonomy, the same for all people. It is the affective side that varies. Second, the order of sensory elements and their reparation into groups or forms are two different phenomena, the latter being a phenomenon, affective in nature. Third, concepts have as their origin an affective or utilitarian tendency; they are not based primarily on form. The author concludes in general that the term form has more a mystical than a scientific connotation.—*T. M. Abel* (Illinois).

3003. **Rignano, E. La teoria della forma della nuova scuola psicologica tedesca contrapposta all'associazionismo della scuola psicologica inglese.** Parte III: **La "Gestalt" in quanto concetto. Conclusione.** (The theory of form of the new German school of psychology compared with the English associationist school. Part III: The "Gestalt" as concerns concepts. Conclusion.) *Scientia*, 1927, **42**, 281-291.—The concepts of geometric figures, of quantity and even abstract scientific concepts are all the result of classification by means of selecting out certain equivalences or similarities in things, even though the actual objects may have no sensorial elements in common. This utilitarian and affective character of concepts is not admitted by the Gestaltists. They apply the word form only to certain kinds of concepts, which makes it impossible for them to generalize concerning the development of abstract and mathematical thought. Conclusion: Two contradictory aspects of the theory seem to find expression in the literature, (a) that the mind is somehow predisposed to synthesize impressions from the external world and to give them meaning, and (b) that all phenomena of mind are given a purely and uniquely sensorial explanation with the aid of form. The Gestaltists are not so successful in developing this latter aspect of the theory as the Associationists are. The Gestaltists have neglected both to use the genetic method and to note the effect of mnemonic phenomena in their researches. Instead of clarifying the subjects which they discuss, they reduce them to worse confusion. They are to be commended, however, for showing the necessity of organization and synthesis instead of excessive analysis of the sensory elements; for recognizing a physiological substratum determining the order in which sensory elements are disposed; and for having developed a new ardor and fervor in research.—*R. G. Sherwood* (Stillwater, Minn.).

3004. **Rignano, E. Zur Gestalttheorie. Antwort auf Herrn Köhlers kritische Erwiderung.** (The *Gestalt* theory. Reply to Köhler's critical answer.) *Scientia*, 1928, **43**, 323-356.—In rebuttal, Rignano restates a number of points made by him in the original articles and adds a defense of the introspective method against the experimental method in psychology, saying that conclusions

drawn from the latter are usually distorted because of neglect of the possibility that the stimulus merely releases the reaction, but does not cause it.—*R. G. Sherwood* (Stillwater, Minn.).

3005. **Roubinovitch, J.** *La formation médico-psychologique de Freud.* (Freud's medico-psychological development.) *Bull. méd.*, 1928, **42**, 589-591.—The author points out the origin and formation of Freud's theories. He insists particularly on the influence exercised by Charcot at the Salpêtrière and by Liébault and Bernheim at Nancy. These men were the teachers who had a great influence over him, and it was immediately afterward that Freud began to develop his system.—*Math. H. Piéron* (Sorbonne).

3006. **Saint-Paul, —.** (*Espé de Metz, G.*) *Thèmes psychologiques. Introduction à l'étude de la cérebrologie.* (Psychological themes. Introduction to the study of cerebrology.) Paris: Vigot, 1928. Pp. 83. 7 fr.—Cerebrology is the study of the brain and of all those modes of activity the manifestations of which we consider as subordinate to the study of the brain. It thus includes the psychological study of all living matter possessing a nervous system. There are eight parts to the book: Charcot, founder of cerebrology; points of departure; intelligence, the directive; the infallibility of intelligence; the credulity of intelligence; the mirror function; on the inconstancy and the inconsistency of the soul; the education of the cerebrologist. No bibliography.—*Math. H. Piéron* (Sorbonne).

3007. **Sanborn, H. C.** *Methodology and psychology.* *Phil. Rev.*, 1928, **37**, 15-41.—There is no one absolutely valid method in psychology. All methods are relative, but no one method is adequate.—*A. P. Brogan* (Texas).

3008. **Sander, F.** *Experimentelle Ergebnisse der Gestaltpsychologie.* (Experimental results of Gestalt psychology.) *Ber. ü. d. Kongr. f. exper. Psychol.*, 1928, **10**, 23-87.—Sander does not want to give a systematic treatment of Gestalt theories. The experimental results of Gestalt perception are discussed. The pathology of Gestalt perception is not considered. Bibliography of 534 titles.—*H. Klüver* (Columbia).

3009. **Schrempf, C.** *Sören Kierkegaard. Eine Biographie.* (Sören Kierkegaard. A biography.) Vol. I. Jena: Diederich, 1927. Pp. 380. 10 Rm.—This first volume treats Kierkegaard up to 1848, the date of appearance of "Crisis, and a crisis in the life of an actress, by Inter et Inter." The author, one of Kierkegaard's earliest German interpreters, characterizes him as "a hybrid of objective description and subjective analysis." The discussion sometimes becomes as lively as if Schrempf were dealing with a living opponent. Yet he desists from evaluating Kierkegaard historically. The strongly subjective element makes the book difficult but stimulating reading. We learn to know Kierkegaard as a problematical and even paradoxical man who experiences the world in typically romantic fashion only within himself; to whom in typically individualistic fashion the self-ego appears as the most important one; who with a longing for the past contrasts primitive with institutional Christianity; but who does not achieve clearness in his own "either-or" question: Whether to live esthetically or ethically; and who dares to confuse his contemporaries through self-irony.—*H. Jancke* (Bonn).

3010. **Sommer, R. [Ed.]** *Allgemeine ärztliche Zeitschrift für Psychotherapie und psychische Hygiene, einschliesslich der klinischen und sozialen Grenzgebiete. Organ der allgemeinen ärztlichen Gesellschaft für Psychotherapie.* (General medical journal for psychotherapy and mental hygiene, including related clinical and social topics. Organ of the general medical society for psychotherapy.) Leipzig: Hirzel. Band 1, Heft 1, January, 1928.—This new periodical, an outcome of the same line of thought that produced the two general medical congresses for psychotherapy, makes its appearance with a program which will show

its specific qualifications. The field which it intends to cover is large and diversified. In addition to practical problems of therapy, it includes the theoretical problems of medical psychology, with all their connections with the related sciences, the close connections of psychotherapy with the clinic, the so-called "minor psychotherapy" of the general practitioner, training in psychotherapy, and, above all, the questions, still new in Germany, of mental hygiene and the social significance of psychotherapeutic endeavors. The first number contains theoretical and casuistic-practical contributions. Sommer writes on *Psychotherapy and Mental Hygiene*, developing this problem pragmatically. Kronfeld makes a contribution to the history of the first psychotherapeutic efforts (especially those of J. C. Reil), and he evaluates the significance of these for the present day. Special problems in psychotherapeutics are discussed from various theoretical standpoints; Schilder, in an article entitled *The Motive of Tearing to Shreds*, describes a primary motive in the psychoanalytic sense. O. Schwarz and Allers contribute psychotherapeutic analyses and observations from the standpoint of individual psychology. This and other contributions are thoroughly worked out with reference to leading theories and general points of view without neglecting the practical application. It has a literature section in which are reviewed selected works in the field which we have outlined.—*Sternberg* (Berlin).

3011. **von Wyss, W. H. Herz und Psyche in ihren Wechselwirkungen.** (Heart and mind in their reciprocal effects.) *Schweiz. med. Woch.*, 1927, **57**, 433-436.—In this introductory presentation the author points out how the heart, the suspension of whose function instantly ends the individual life, has become the most important organ expressive of the mental life and so has come to be the symbol of that which is characteristic of the individual in mankind.—*M. R. Lambezier* (Geneva).

3012. **Wells, F. L. Psychogenic factors in emergentism and allied views.** *J. Phil.*, 1928, **25**, 71-75.—Science has assumed determinism, which involves a denial of ethical values. We cannot logically eat the cake of determinism and have that of ethics, except practically by the process of dissociation. Recent doctrines of emergent evolution or emergentism attempt to avoid this dilemma, but they do not give us that freedom which is "demanded by the essence of ethical decision."—*A. P. Brogan* (Texas).

3013. **Weygandt, W. Kraepelins psychologische Forschertätigkeit.** (Kraepelin's psychological research work.) *Psychol. Arbeit.*, 1928, **9**, 359-374.—Weygandt gives a brief systematic review of the psychological life work of Kraepelin. He shows his place in the new psychology, especially in its connection with research in psychiatry, and justifies the use of clinical experimental psychology as a method of diagnostic investigation in psychiatry.—*O. Graf* (Munich).

3014. **Wundt, E. Wilhelm Wundt's Werk. Ein Verzeichnis seiner sämtlichen Schriften.** (Wilhelm Wundt's works. A list of his collected writings.) *Abhandlungen der sächsischen staatlichen Forschungsinstitute. Forschungsinstitut für Psychologie* Nr. 28. Munich: Beck, 1927. Pp. 78.—This bibliography, carefully compiled by Wundt's daughter, Eleonore Wundt, contains in chronological order a list of all his printed books, articles, and reviews; a list of the journals and books edited by him; a list of his translations and lectures; and an index.—*H. Jancke* (Bonn).

[See also abstracts 3222, 3225, 3281.]

#### SENSATION AND PERCEPTION

3015. **Adrian, E. D., & Matthews, R. The action of light on the eye. Part II. The processes involved in retinal excitation.** *J. Physiol.*, 1927, **64**, 279-301.—The electrical response of the retina and of the optic nerve of *Conger vul-*

garis to flashes of light have been studied by measurements of the reaction time and of the form of the response. Below a certain critical duration the reaction time is longer and the impulse frequency is smaller as the duration of the flash is reduced, the intensity being constant. The response to a given quantity of light (intensity  $\times$  duration  $\times$  area) is constant, if the flash is shorter than the critical duration: the reaction time is inversely proportional to the quantity of light. The processes leading to excitation may be divided into a primary change coinciding with the flash and forming a product proportional to the quantity of light received, and a secondary change outlasting the flash and leading ultimately to the excitation of the nervous structures. The rate of the secondary change is a linear function of the amount of light effect formed in the primary change. The transmission of the light effect must take place rapidly as part of the primary change and the secondary change must occur in the region to which the light effect is transmitted. These changes are discussed on the basis of Hecht's scheme.

—H. Banister (Cambridge, England).

3016. Bunch, C. C. **Auditory acuity after removal of the entire right cerebral hemisphere.** *J. Amer. Med. Asso.*, 1928, 90, 2102.—In a patient whose entire right cerebral hemisphere had been removed, tests with the audiometer showed that the auditory acuity of the two ears was approximately equal and that none of the tones produced were inaudible in either ear.—G. J. Rich (Bellevue Hospital).

3017. Crosland, H. R., Miller, R. C., & Bradway, W. E. **Oral perceptions in relation to anosmia.** *J. Exper. Psychol.*, 1928, 11, 161-166.—Tests were made with olfactory and gustatory stimuli on a subject whose anosmia was nearly or quite complete. The kinesthetic, thermal and pressure qualities from olfactory stimuli were usually lost with dilutions of 1/500, but the two control-subjects still had these qualities at this dilution. The subject's taste sensitivity was neither above nor greatly inferior to that of the controls, and his ability to judge the nature of food substances put on his tongue is normal but not superior to that of the controls.—F. A. Pattie (Harvard).

3018. Gault, R. H., & Crane, G. W. **Tactual patterns from certain vowel qualities instrumentally communicated from a speaker to a subject's fingers.** *J. Gen. Psychol.*, 1928, 1, 353-359.—A multiple unit teletactor, or mechanical ear grafted upon the skin, designed and built by the Bell Telephone Laboratories, analyzed the sounds of speech according to their frequencies, and multiplied and brought out several tactual distinctions among the forms of speech. The instrument included 5 magnets and 5 vibrators, one for each finger and the thumb of a hand. "When all fingers are in contact the subjects recognize no stimulation of the fifth finger which receives vibrational rates of 2000 and above. . . . There is a great paucity of recognizable stimulation upon the middle or third digit finger—500 to 1000 d.v. . . . On the whole the thumb and fourth digit are most distinctly impressed—up to 250 d.v. and 1000 to 2000 d.v. respectively. . . . The index finger—250 to 500 d.v.—is usually indistinctly stimulated. . . . An inspection of the patterns indicates that if there are no factors but clear localization involved certain vowel qualities will be distinguished from others with some difficulty."—H. Cason (Rochester).

3019. Halbertsma, K. T. A. **Over erfelijke Ontstaarding van de Gele Vlik gepaard met Kleurenblindheid.** (On hereditary degeneration of the macula lutea associated with color blindness.) *Nederl. Tijdschr. v. Geneesk.*, 1927, 71, ii, 2056-2068.—Seven males in four generations affected with color blindness and retinal degeneration, six other males color blind. The retinal degeneration is mainly limited to the macular region, appears early in life, and is symmetrical.—(From *Eug. News.*)

3020. Hecht, S. **On the binocular fusion of colors and its relation to the**

ories of color vision. *Proc. Nat. Acad. Sci.*, 1928, **14**, 237-240.—Evidence against the Hering and Ladd-Franklin color vision theories (which assume special receptors for yellow and for white) can be derived from phenomena of binocular fusion. Helmholtz was unable to produce fusion in this manner, but Trendelenberg and Rochat have subsequently devised apparatus which yield color mixing equations comparable to those obtained monocularly. Their demonstrations were somewhat marred by the fact that binocular fusion was reputed to be difficult, and to require much practice. By a simple device employing Wratten filters, the author was able to produce the effect of binocular fusion in untrained subjects, red and green giving yellow, and blue and yellow giving a satisfactory white. Successful results were obtained in 114 out of 120 cases; 5 of the 6 failures were known to be due to color blindness. The Young-Helmholtz 3-receptor theory may yet furnish a satisfactory basis for an account of the mechanisms of color vision.—H. E. Jones (California).

3021. Kiesow, F. The problem of the condition of arousal of the pure sensation of cutaneous pain. *J. Gen. Psychol.*, 1928, **1**, 199-212.—A critical discussion of A. Goldscheider's views on pain. The author's experimental observations are in favor of M. von Frey's theory, and lead to the conclusion that separate physiological mechanisms must be assumed for the sensations of pain and touch, and that the conditions of their arousal are different. 1 table.—H. Cason (Rochester).

3022. Knudsen, V. O. "Hearing" with the sense of touch. *J. Gen. Psychol.*, 1928, **1**, 320-352.—An experimental investigation of the extent to which the sense of touch is endowed with the analytic functions required for hearing speech or music; and a comparison of these characteristics with the analogous ones possessed by the sense of hearing. The apparatus consisted principally of "(A) a vacuum tube oscillator, which will generate frequencies from 10 to 50,000 vibrations per second; (B) an electrical filter which renders the vibrations simple harmonic; (C) an electric network including a thermocouple and galvanometer for controlling and measuring the current input into the vibrator; (D) an electromagnetic telephone receiver adapted to communicate its vibrations to a pivoted lever; (E) an optical system for determining the amplitude of vibration of the vibrating lever." Most of the tests were made with the end of the right index finger. (1) The lower frequency limit to which the sense of touch responds is about 16 d.v. The higher limit is 1600 d.v., but it may be as high as 4000 d.v., the range above 1600 d.v. not being investigated. (2) The sensitivity of touch to a vibrating body was determined, as a function of frequency of vibration, between 32 d.v. and 1600 d.v. The amplitude of vibration, for a given frequency, seemed to be the important factor in determining the intensity of vibration, and the amplitude of vibration was used in measuring sensitivity. The magnitudes of the amplitudes at the minimum thresholds vary from slightly less than .00001 cm. to nearly .001 cm. The maximum sensitivity occurred at a frequency of about 256 d.v. It seems probable that vibrations as frequent as 3000 to 4000 d.v. should be felt. (3) In determining the sensibility of touch to small differences of amplitude of a vibrating body, the sensibility was expressed in terms of the ratio of the smallest discernible increment or decrement of amplitude of vibration to the entire amplitude of vibration ( $\Delta A/A$ ).  $\Delta A/A$  decreases as the amplitude increases. It is approximately the same function of intensity for all frequencies, and tends to approach the value .05 at amplitudes of 50 to 100 times the minimal-threshold amplitude. The graphs are very similar to those obtained for hearing. The modification of the Weber-Fechner law proposed by Nutting for vision, which has been shown to apply to hearing, holds also for the sense of feeling of vibration. (4) The frequency of a vibrating body must change as much as 15% to 30% before a difference is noticeable by the sense

of touch. Touch is not well adapted to recognize small changes of frequency. The results on frequency-sensibility seem to support the "resonance" theory of hearing. The general conclusion is reached that the tactual sense possesses "certain analytic functions which, if adequately trained, should be serviceable for the interpretation of speech. . . . The tactual sense is extremely limited . . . in its ability to appreciate absolute frequency and small differences of frequency. The tactual interpretation of music therefore would be almost void of melody or pitch coloring. The rhythm, the time intervals and much of the expression would be appreciated as well as in hearing, but only the larger intervals of pitch would have any significance. The tactual interpretation of speech, on the other hand, seems to encounter less severe difficulties." 2 tables and 16 figures.—*H. Cason* (Rochester).

3023. **Lapinsky, M.** Über Schmerzen visceralen Ursprungs. (Pains of visceral origin.) *Arch. f. Psychiat.*, 1927, **82**, 43-77.—A pain in the right arm, if there is no local cause for it, may indicate a diseased condition in the liver, an affection of the stomach, a disturbance in the intestines or in the right hypogastrum. The author accepts as means for the irradiation of the pain the vascular centers in the thoracic cord, the irritation of which may form objective bases for the pain through influence on the peripheral vessels. The author differentiates five separate stages of the process leading to the conscious sensation of pain, which, by means of strongly established anatomical relations, admits unequivocal reference to its visceral stimulation carried to the spinal cord by the sympathetic. The author promises further contributions in this field of so-called reflex pains.—*W. Wirth* (Leipzig).

3024. **Lijo Pavía, J.** La mácula, región esencial de las manifestaciones retinarias en los estados patológicos generales. (The macula, an important field in retinal manifestations of general pathologic conditions.) *Rev. Oto-Neuro-Oftal.*, 1928, **2**, 70-82.—The head of the ophthalmological clinics of Ternú and Rivadavia Hospitals explains the convenience of photographs of interior of the eye (made by retinograph) to supplement other recognized means of study of the macula and fovea. His personal study of the fovea has yielded a seventh type of foveal reflection which he calls "disassociated." This type is found in general pathologic states. In a patient suffering from ventricular tumor, photographs showed, in addition to luminous ring (reflection *in valla*), in one eye the characteristic, brilliant, point-like reflection of the fovea surrounded by others less clear forming an incomplete ring; while the other eye showed the white point with three external and unequal points of smaller reflections. Photographs of a second case (operable frontal abscess) yielded certain evidence of central edema of the retina.—*C. Burson* (Newcomb, Tulane).

3025. **Meyer, M. F.** The hydraulic principles governing the function of the cochlea. *J. Gen. Psychol.*, 1928, **1**, 239-265.—"Rejecting all fantastic 'anatomical' data, that is, not making any anatomical assumptions but those of facts which are clearly visible under the microscope, but, on the other hand, taking conscientiously into account everything that can thus be seen, we derive a general equation describing the hydraulic functions of the mammalian cochlea. . . . Whenever anything occurs on the outside which deserves to be called a sound in the sense of the physicist, and which varies more or less periodically with the time, we want to know first, what length or lengths of the phragma will be involved, because this determines the number of sensitive cells stimulated and thereby the magnitude of the nervous flux (or 'the sensation intensity,' loudness); and we want to know second, how frequently per time unit these various lengths of the phragma are shaken, because this determines the nature of the stimulation and accordingly the quality of the chemical process resulting in each of those sensitive cells (or 'the sensation quality,' pitch). Thus, our most important aim must be

the establishment of a relation between  $l$  and  $t$ . . . . The question is solved in special cases for two-fold verification: (1) by auditory observation; (2) by experimentation on a large, transparent, hydraulic model. . . . The hydraulic theory during its life of thirty years has received some praise by the few who were willing to read it, has been viciously misrepresented by some who would not or could not comprehend it, has been innumerable times dogmatically rejected by those who did not even know what it consists in. We invite serious criticism of its basic assumptions, its mathematical analysis and, last but not least, its agreement with the facts of hearing. The concept of a 'traveling' bulge is not a part of the hydraulic theory. The author requests textbook and magazine writers to cease misquoting him. He has never either enounced or supported any 'traveling' bulge theory." 9 figures. Bibliography.—*H. Cason* (Rochester).

3026. **Miles, W.** **Group demonstration of the blind spot.** *J. Gen. Psychol.*, 1928, 1, 368-371.—Description of a 15 minute class exercise. 2 figures.—*H. Cason* (Rochester).

3027. **Miles, W.** **On plotting one's own blind spot.** *J. Gen. Psychol.*, 1928, 1, 371-373.—Description of a method similar to the one used by Helmholtz.—*H. Cason* (Rochester).

3028. **Quidor, D., & Herubel, M.** **Les perceptions visuelles.** (Visual perceptions.) *Rev. Scient.*, 1927, 65, 513-518.—The author first explains the Helmholtz theory. He then explains by experimental means that the perception of relief is due to a psychic fusion of the different retinal images; next he shows that these images may be received on the same retina either successively or simultaneously. Each retina receives many different images of the same object; these correspond in each hemisphere to a similar number of elementary cerebral images. In monocular vision these images are fused into a distinct cerebral image appropriate to each hemisphere. One of these, called the principal cerebral image, formed in the hemisphere on the side corresponding to the retinal impression, dominates the other, which is called the secondary cerebral image. In binocular vision each hemisphere perceives in this way a secondary and a principal cerebral image which are fused into a distinct cerebral image. This cerebral image becomes objective only to the subject who perceives it. It gives value to that which is of value in the formerly acquired cerebral images which are retained by the memory and to that which controls it.—*Math. H. Piéron* (Sorbonne).

3029. **Roelofs, C. O.** **Optische Lokalisation nach Strabismusoperation.** (Optical localization following operation for strabismus.) *Arch. f. Augenheilk.*, 1928, 99, 145-159.—Tenotomy of both external recti in a case of divergent strabismus improved alignment without wholly perfecting it. The patient was subjected to visual localization tests, A, several weeks after the operation, and again, B, six months later. A modification of Landolt's perimetric apparatus made possible a comparison of the subject's optic with his corresponding haptic localizations. Peculiarities of localization thus demonstrated and the considerable differences between the results of A and B are ascribed to such factors as the change in corresponding retinal areas due to the tenotomy, habit reorganization, and the existence of one-sided myopia.—*S. M. Newhall* (Yale).

3030. **Schmidt, F.** **Experimentelle Untersuchungen über die Wirkung ähnlicher Inserate und Figuren.** (Experimental studies on the effects of similar advertisements and figures.) *Arch. f. d. ges. Psychol.*, 1927, 60, 417-456.—A number of illustrated advertisements were successively presented. After a pause, a second series was presented, some members of which were similar to certain members of the first series (though not identical with them). The subjects were asked to report similarities or identities. Increase of the pause between the two series was found to increase the tendency to confuse similar figures,

i.e., to report them as identical. But when the pause was greater than one day, the number of confusions decreased and the number of correct responses increased. This result is probably due to the uncertainty of the subject under the difficult conditions. So far as the tendency to confusion is concerned, it makes no difference whether the similarity is between individual elements or form-qualities. The tendency to confuse similar figures does not depend upon the subject's intelligence or his ability to retain a large number of details, but does depend upon the precision of his memory.—*D. McL. Purdy* (California).

3031. **Takagi, K.** **Effect of figure lines on the structure of visual field.** *Jap. J. Psychol.*, 1927, 2, 217-261.—A part of the visual field surrounded by figure lines tends to maintain its structure and quality much more than other parts of the visual field; in other words, figure lines intensify the structure of the visual field that they surround. This thesis was supported experimentally by means of a successive exposure tachistoscope. In one series card *a*, on which a square, 1 cm. long and wide, was drawn with a line, 1 mm. thick, was exposed for  $8\sigma$ . After an interval of  $32\sigma$ , card *b*, on which a black square, 2 cm. long and wide, was drawn, was exposed for  $8\sigma$ . What was seen was a white square at the center of dark grey field. The reversal of the order of exposure of the two cards did not change the visual impression. The time of exposure and of interval could also be changed within certain limits without modifying the seen figure. When a circle with a break in the rim was used, the white color protruded out from inside into the dark surrounding field. Colored fields or fields with diagonal lines could be used with the same effect. Various figures with complete and incomplete closure were used, resulting in various degrees of figure quality perceived. The exposed figures and the seen figures are illustrated by six figure plates.—*J. G. Yoshioka* (California).

3032. **Vogt, A.** **Das Sehnlernen Blindegeborener nach spät erfolgter Operation.** (The visual learning of congenitally blind persons following operations late in life.) *Schweiz. med. Woch.*, 1927, 57, 753-755.—The author reports experimental studies of the vision of two persons, who had been blind from birth, following operations for cataract; one was 20 years old, the other 35. The results are in agreement with those known in similar cases and stand in support of the empirical concept of the acquisition of our images, particularly those concerned with form and space. In spite of the absence of function for many years, the retina is capable of registering luminous excitations. However, the acuity of the recovered eye remains weak, but leaves us to suppose an amelioration with time. The author explains this deficiency in acuity by the lack of activity of the retina, and recalls on this subject the cases of amblyopia and anopsia and temporary blindness.—*M. R. Lambrecier* (Geneva).

3033. **Wever, E. G.** **The effect of a secondary sound upon hearing.** *Science*, 1928, 67, 612-613.—A background of tone always reduces the acuity of hearing for other sounds. At the entrance of the secondary tone the acuity is considerably diminished, but recovery of sensitivity begins immediately and proceeds at a rapid rate until, under a given set of conditions, it may become three or four times as great as it was at first. Sensitivity does not, however, reach the level shown under conditions of silence.—*G. J. Rich* (Bellevue Hospital).

[See also abstracts 2992, 3052, 3064, 3082, 3097, 3100, 3232, 3252, 3306.]

#### FEELING AND EMOTION

3034. **Joussain, A.** **Les passions humaines.** (Human passions.) Paris: Flammarion, 1928. Pp. 252. 12 fr.—The author presents an explanation of the present ideas of sentiments and passions; their genesis; conflicts with reason; the birth, evolution and death of the passions; how they transform personality;

and their social rôle. The first part of the book describes the laws which are applicable to all the passions: (1) the nature of passions and that which distinguishes them from emotion, inclination and sentiment; (2) the genesis of passions, spontaneous passions and provoked passions, the rôle of tendencies and intelligence; (3) the conflict, passions and reason; (4) the evolution of the passions, derivation and transformation of passions and their death; (5) the effects of the passions; their action on understanding and on the will; (6) the domination of the passions, the hierarchy of tendencies, the rôle of the unconscious, how we create in ourselves the motives for resisting the passions. Virtue lies in an equilibrium of the passions. After describing the classical conception which declared that human nature was reasonable and free and that passion was abnormal and should be destroyed, the author maintains that it is, on the contrary, impossible for man to escape from passions that he may dominate them only by utilizing and reducing them, that the passions may be transformed into sentiments and virtues, that it is under the control of intelligence that this transformation may be accomplished, and that a continual effort of attention and reflection may thus, without changing our nature, elevate us. In the second part the author reviews the special laws pertaining to the various passions: passions proceeding from alimentary needs, and the need of exercise and of repose (greediness, intoxication, desires for sport and adventure, laziness); passions related to self-preservation (hate, antipathy, fear); passions related to the reproductive instinct (sexual desire, love, maternal and paternal love, jealousy, coquetry and modesty); passions related to the instinct of conservation and well-being (euphoria, avarice, jealousy, envy); passions related to the instinct of domination and superiority (pride and vanity, ambition, fanaticism). No bibliography.—*Math. H. Piéron* (Sorbonne).

3035. **Strasburger, M.** *Rozwój uczuciowy młodocianej pracownicy.* (The emotional development of the young working girl.) *Polskie arch. psychol.*, 1927, 1, 235-246.—Certain tests for association and imagery employed by Evard were given to girl students in a vocational school in Warsaw. The results showed differences in types of imagery and in emotional responses between superior and inferior intelligence.—*T. M. Abel* (Illinois).

[See also abstract 3152.]

#### ATTENTION, MEMORY AND THOUGHT

3036. **Błachowski, S.** *Badania z zakresu rozwoju pamieci licb i zdolnosci rachunkowych.* (Researches on the development of memory for numbers and on calculating ability.) *Polskie arch. psychol.*, 1927, 1, 122-141.—The author reports the results of examining S. Krieger, a lightning calculator, both in 1922 and in 1926; after the 4 year interval, Krieger improved to a considerable extent in speed of calculating. The increase in speed was due to having memorized a greater number of logarithms and to having acquired more "natural aids" or short-cut tricks. The conclusion is made that the abridged processes of calculating employed by rapid calculators should be made more use of in scholastic training.—*T. M. Abel* (Illinois).

3037. **Bloor, C.** *Some notes on memory.* *Psyche*, 1928, 8, 89-96.—No experience we have had is of so little importance that it does not leave a trace which modifies the previous disposition of the organism. One may remember an appointment or he may forget it. But forgetting does not signify that no trace was left. Psychologists are disposed to speak of remembering and forgetting more than of memory proper. The forgotten fact has still its trace, and these traces survive subconsciously. Unfortunately the introduction of nonsense syllables has left meaning out of account. Nevertheless it has given us some laws.

What we forget is as important as what we remember. An interesting experiment was performed by Ballard on elementary school children in London, in which the second testing showed marked improvement on the first. The explanation of this phenomenon has not yet been made, but the writer thinks it was due to subconscious activity.—*T. R. Garth* (Denver).

3038. **Deutsch, E.** *The dream imagery of the blind.* *Psychoanal. Rev.*, 1928, **15**, 288-293.—The author, blind from birth except for light perception, recounts some of her own dreams in detail; visual imagery does not occur, but auditory imagery is most prominent; kinesthetic, static and tactile modes also occur, but gustatory and olfactory imagery have never been experienced. Of 67 blind children, 6, all blind before 5 years but not congenitally so, report regular visual imagery in dreams; the remainder are doubtful, but probably mostly negative; several cases are cited.—*R. R. Willoughby* (Clark).

3039. **Hall, M. E.** *Remote associative tendencies in serial learning.* *J. Exper. Psychol.*, 1928, **11**, 65-76.—Every one of 40 subjects learned 12 lists of 10 non-sense syllables and 12 test-lists made by replacing the even-numbered syllables of each list with the even-numbered syllables of another one of the original lists, so that each syllable retained its original position in the list. Control-lists were made by taking the first syllable from the first original list, the second syllable from the second, and so on. Hull's exposure apparatus was used; exposure was 1.5 sec. for each syllable. The number of repetitions required for one correct recitation was obtained for learning test and control-lists immediately after learning the original lists and a week afterwards. For immediate relearning the test-lists show 4.9% more savings over the original lists than do the control-lists; after a week the savings amount to 33.4%, statistically a highly reliable difference. "The functioning of remote associative tendencies is inhibited in proportion to the strength of the original learning and is facilitated, within certain limits, in proportion to the period of forgetting."—*F. A. Pattie* (Harvard).

3040. **Hall, W. W.** *The time-sense.* *J. Ment. Sci.*, 1927, **73**, 421-428.—Experiments to determine whether or not a time sense exists were made on four individuals. Three methods were used: (1) guessing at the precise minute shown on an unseen watch; (2) willing, beforehand, to consult the watch at a precise minute; (3) willing, before sleep, to wake at a precise minute. The results, as shown by a higher percentage of correct guesses than can be explained by chance, warrant the conclusion that a time sense exists. Deliberation favors accuracy in guessing; hastiness favors approximity in guessing; reasoning confuses the time-sense; some process analogous to sense-perception best mirrors the findings of the time sense; practice improves time-guessing; staleness may deteriorate time-guessing (yet a prolonged break in the experiment may not cause a greater success on resuming); personality affects the efficient working of the time sense. In time-willing with a waking interval success was exactly the same whether the interval was varied or uniform; successes were about half as much again as in watch guessing or in watch imagining and about one-seventh greater than in deliberate guessing; success was largely due to visualizing; practice improves time-willing. In time-willing with a sleep interval persistent practice tends to diminish accuracies, probably through staleness; habit is further discounted by the facts that the afternoon trials were made at ever-varying times, and that, in 72 of them, irregular periods of sleep were willed. Accuracies were nearly twice as frequent when an irregular period of sleep was willed as when a regular period was willed.—*E. F. Symmes* (Institute for Child Guidance).

3041. **Piaget, J.** *La causalité chez l'enfant.* (The child's view of causality.) *Brit. J. Psychol.*, 1928, **18**, 276-301.—Piaget limits the discussion to explanations of movement, and finds four well marked stages: (a) up to the age of 3 or 4, a magical phenomenistic stage; (b) from 3 to 8 a "moral" stage, which

is a mixture of animism and artificialism; (c) from 8 to 11 a dynamic stage, the bodies themselves being endowed with forces which produce movement; and (d), at about 10 to 11, a stage when mechanical explanations are given.—*H. Banister* (Cambridge, England).

3042. **Pyle, W. H.** *The psychology of learning.* (New Ed.) Baltimore: Warwick & York, 1928. Pp. 441 + ix.—The general plan of the 1921 edition is retained. The chief point of difference consists in the addition of over one hundred statements of educational applications of learning principles; these are appended to the various chapters. Illustrative material is given to support the principles. A brief chapter on the "Psychology of Special Subjects" has been added, as has one dealing with "A Theory of Learning." The latter purports "to set forth a theory of brain action that will explain the various facts of the psychology of learning." The bibliography has been enlarged and brought up to date.—*F. A. Geldard* (Clark).

3043. **Rodrigue, G.** *L'attention.* (Attention.) *Psychol. et vie*, 1928, **2**, 86-87.—To be attentive is to be able to discipline active curiosity by the use of imagination curbed and directed by reason. It is the correcting and restricting of illusions. Furthermore, to be attentive is to possess the faculty of discrimination of that which is in oneself, with the recognition of it as such, from that which exists in the object.—*Math. H. Piéron* (Sorbonne).

3044. **Takehara, K.** *On the abstraction.* *Jap. J. Psychol.*, 1927, **2**, 283-294.—Two subjects were shown by a projection lantern for 1/5 sec. four small circles of different colors arranged in a geometrical figure such as a square, triangle, rhomboid, etc., and asked to report on what they had seen under four sets of *Aufgabe* in turns, namely, the whole figure, the form of parts, the color of parts, no instruction. The report on the item to which the subject instructed to pay attention was given first, and the rest of the items were reported in order. The results confirmed Külpe's finding that a greater number of correct *Aussage* were given on the item attended to, that is, more correct answers for the whole figure than for the form or color of its parts were given under the instruction that the whole figure should be looked for. To explain the phenomenon the writer thinks that it is not necessary to bring in abstraction, whose chief characteristic is selection, according to Külpe and Seifert. Active attention and integration are adequate to explain the whole process. Perception by its own nature acts selectively or differentially under different mental sets.—*J. G. Yoshioka* (California).

3045. **Wilcocks, R. W.** *The effect of an unexpected heterogeneity on attention.* *J. Gen. Psychol.*, 1928, **1**, 266-321.—"A number of experiments are described in which attentional effects occur in agreement with Selz's laws of *Distinktionsbeachtung* and *Widerstreitsbeachtung*. . . . These attentional effects are sometimes reversed under the conditions stated in the laws, and . . . this phenomenon as well as that of apperceptive shift forms real exceptions to the laws as formulated by Selz. . . . A theory is developed as to the differences among the causal conditions which bring about these differences in attentional effect; the theory resting, in part, on a hypothesis stated by Henning with regard to an accumulation of energy, in a limited area, consequent on the temporary inhibition of one excitation by another not congruent with it." 7 tables and 5 figures. Numerous introspections.—*H. Cason* (Rochester).

[See also abstracts 3030, 3035, 3118, 3173, 3293, 3300.]

## NERVOUS SYSTEM

3046. Ajello, L. **Contribution statistique à l'étude de l'éterotopie de la substance grise du cerveau.** (A statistical contribution to the study of heterotopia of the gray substance of the brain.) *Riv. di pat. nerv. e ment.*, 1928, 33, No. 1.—In a macroscopic examination of the brain of a woman 58 years old who died from pneumonia, the author found an absence of convolutions of the surface and a general atrophy of the cortex of the right occipital lobe; on the other hand, he found many islands of gray substance in the white matter. The histological structure of these islands shows that in part this substance resembles that of the cortex and in part that of the nuclei of the base of the brain. The author concludes that this is a case of congenital heterotopia due to an irregularity of development.—*G. Corberi* (Milan).

3047. Dana, C. L. **Early neurology in the United States.** *J. Amer. Med. Asso.*, 1928, 90, 1421-1424.—*G. J. Rich* (Bellevue Hospital).

3048. Pavlov, I. P. **Certain problems in the physiology of the cerebral hemispheres.** *Proc. Roy. Soc. Lond. (B)*, 1928, 103, 97-110.—Excitation and inhibition, irradiation and concentration, and mutual induction are the foundations of the activity of the hemispheres which preeminently function to keep the organism in equilibrium with its environment. Evidence accumulates that new nervous connections are established only in the hemispheres. Experiment shows that a stimulus preceding an unconditioned reflex establishes a conditioned reflex, which may be strengthened if the stimulus is continued while the reflex acts; but, if the stimulus is applied after the beginning of the reflex, it becomes inhibitory, the dog even declining food. How this occurs is not at present fully known. The analyzing functions of the hemispheres appear to depend on the existence of special cells in the cortex for different afferent fibres. Conditioned reflexes to specific stimuli may be deranged by localized cortical lesions. Localized disturbances of the activities of cortical elements may also be obtained by attempting to transform a long established conditioned reflex, or by connecting a definite cortical element with an excitatory and an inhibitory response and arousing both at the same time. If a definite part of the cortex is extirpated, conditioned reflexes connected with that area disappear; the exciting stimulus if applied produces general inhibition, and sometimes sleep. After a while the conditioned reflexes may return to a slight extent. It appears that, besides the special areas representing different analyzers, there are certain elements in reserve which are dispersed over the whole mass of the cortex, but they do not participate in any of the higher synthesis and analysis; they are not even capable of reaching the state of functional perfection with which the special areas are endowed. Fluctuations in the responses are probably due to the stimulus being too strong. There are great individual differences in the value of the too strong stimulus. "Temperament" probably depends on the amount of "excitable substance" in the cortical cells. Pavlov distinguishes four temperamental types in dogs—the excitable and inhibitable at the extremes, and the stolid, quiet and lively, mobile in the center.—*H. Banister* (Cambridge, England).

3049. Pines, L. **Über die Innervation der Epiphyse.** (The innervation of the epiphysis.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1927, 111, 356-369.—On the one hand the nervous mechanism of the epiphysis-parenchyma originates from the central nervous system through the peduncle of the epiphysis (fibiae pineales superiores, mediae and inferiores, which arise from the taenia thalami and the ganglion habenulae, passing through the commissura interhabenularis and commissura posterior). On the other hand sympathetic nerve fibers enter with the blood vessels as a continuation of the fibers of the highest cervical ganglion. With Walter, reflex functions are attributed to the organ, in addition to internal secretion. Bibliography.—*W. Wirth* (Leipzig).

3050. Rindone, A. *Poids de l'encephale chez les Siciliens.* (The brain weight of Sicilians.) *Riv. di pat. nerv. e ment.*, 1928, **32**, No. 6.—Following the method of Chiarugi's *Treatise on Anatomy*, Rindone found with 100 Sicilians from 20 to 60 years in age a mean weight of 1262.89 grams for the men and 1147.08 for the women in contrast to the means found by Chiarugi for Italians, 1308 for men and 1171 for women. The cephalic index showed a variation of from 72 to 76 in the 100 cases. All the heads were dolichocephalic. Among the other measurements it is interesting to note the relationship between the weights of the two hemispheres: they were equal in 22%, the left hemisphere was heavier in 40%, and the right was heavier in 38% of the cases. These figures have only a suggestive value in view of the conditions of the environment, the social class of the subjects, etc.—*G. C. Ferrari* (Bologna).

3051. Rizzolo, A. *Études expérimentales sur l'excitabilité de l'écorce cérébrale du chien.* (Experimental studies of the excitability of the cerebral cortex of the dog.) Paris: 1928. Pp. 260.—(Thesis of the Faculty of Sciences of Paris.) The author used L. Lapieque's chronaxy method for the study of the sensitivity of the cerebral cortex. He localized in each motor region many motor points controlling the same movement; these motor points have different chronaxies. There is always a motor point having a chronaxy which is decidedly low; this is the optimum motor point. On the same side of the cortex the value found for the chronaxy of the optimum motor points is the same for the flexion and extension of the paw and of the tail; the chronaxies of the corresponding optimum motor points have the same value. He also found the same chronaxy for the grey substance as for the white substance of the cortex.—*Math. H. Piéron* (Sorbonne).

3052. Rizzolo, A. *Influence des successions d'obscurité et d'éclairement sur la chronaxie du point moteur du clignement.* (Influence of successions of darkness and illumination on the chronaxy of the motor point for winking.) *C. r. Soc. biol.*, 1928, **98**, 1201-1203.—The chronaxy of the motor point for winking is increased on both sides of the cerebral cortex if both eyes are kept for a sufficient period of time in nearly complete darkness. The total suppression of light during an hour or two brings about a diminution of chronaxy of the motor point corresponding to the eye so treated. If the eye has been in darkness for 24 hours, the chronaxy of the motor point for winking is increased with reference to that of the normal eye. If a strong light stimulus is brought to bear on an eye which has been subjected to total darkness, the chronaxy of the motor point first diminishes, then increases, and finally surpasses its initial value if the excitation is sufficiently prolonged.—*Math. H. Piéron* (Sorbonne).

[See also abstracts 3006, 3016, 3023, 3160.]

## MOTOR PHENOMENA AND ACTION

3053. Akroyd, F. *Some tests and correlations of hand-eye coordinations.* *For. Educ.*, 1928, **6**, 127-143.—Using specially devised tests with secondary boarding school pupils, ages 12-16, relations were found between (1) momentary adaptation with stationary target, (2) momentary adaptation with moving target, (3) continuous adaptation with stationary target, and (4) continuous adaptation with moving target. Reliabilities of tests ranged from .68 to .93, and increased with practice to .80 to .97. Intercorrelation varied from -.15 to .25 for all subjects combined. Negligible correlations were found with age and with visual acuity. Significant differences between mean scores of boys and of girls were found for two tests, once in favor of the boys, once of girls. Conclusions are that we are not justified in speaking of a *motor* ability but only of motor abilities; that for vocational guidance purposes each specific combination of movements in

any occupation will require a specific motor ability test.—*K. M. Cowdry* (Stanford).

3054. **Barker, L. F.** *On the relation of the functions of the glands of internal secretion to the thinking, the feeling, and the striving of man.* *J. Florida Med. Asso.*, 1927, 13, 254-260; 274.—Thyroid, parathyroid, pituitary, pancreas, gonads, suprarenal, psychoses, idiocy, dwarfism. Bibliography.—(From *Eug. News.*)

3055. **Berman, L.** *The glands regulating personality: a study of the glands of internal secretion in relation to the types of human nature.* (2d Ed.) New York: Macmillan, 1928. Pp. ix + 341. \$3.50.—A presentation in popular style of Berman's beliefs as to the endocrines in relation to personality types. In addition to the material of the first edition, somewhat revised, there is an introduction and some further consideration of insulin and parathyroid therapy. No bibliography.—*H. E. Starr* (Pennsylvania).

3056. **Bordas, F., & Courtier, J.** *La prophylaxie de la fatigue et ses avantages sociaux.* (The prophylaxis of fatigue and its social advantages.) *Bull. Institut. gén. psychol.*, 1927, No. 4-6, 205-218.—*Math. H. Piéron* (Sorbonne).

3057. **Brown, T. G.** *Absence of a linear relationship between graded simple reflex flexions and the relations thereof evoked by a constant extension-producing stimulus.* *Proc. Roy. Soc. Lond. (B)*, 1927, 102, 143-149.—In decerebrate cats, graded reflex magnitudes of simple flexor shortenings are obtained in response to flexion-producing stimuli of different intensities. Each of the simple shortenings is then subjected to the "inhibitory" effect of a constant extension-producing stimulus, thus giving compound flexor shortening. There is no linear relationship between the simple and the compound flexor shortening.—*H. Banister* (Cambridge, England).

3058. **Brown, T. G.** *Absence of a linear relationship between the reflex flexor shortenings evoked by a graded series of flexion-producing stimuli and the inhibitory lengthenings of a constant extension reflex evoked by the same stimuli.* *Proc. Roy. Soc. Lond. (B)*, 1927, 102, 150-158.—If each of the flexion-producing stimuli is compounded with a constant extension-producing stimulus, and the resulting lengthening (relaxation) of the extensor muscle is measured, no general linear relationship is found between the magnitudes of the simple flexor shortening and of the compound extensor lengthening.—*H. Banister* (Cambridge, England).

3059. **Brown, T. G.** *The relation of the magnitudes of remaining reflex shortenings in two antagonistic muscles during compound stimulation.* *Proc. Roy. Soc. Lond. (B)*, 1927, 102, 159-173.—When two antagonistic reflex stimuli are applied concurrently, the remaining shortenings of two antagonistic muscles during compound stimulation are related to each other. In many cases, where one or both of the reflex stimuli are varied in intensity, the sum of the remaining shortenings in antagonistic muscles is constant. In other instances a series of sums bears an approximate relationship of linearity to the magnitudes of the simple reflex shortenings evoked by the series of graded reflex stimuli used. This relationship appears to be more fundamental than the reciprocal reflex relationship between shortening in one muscle and the inhibitory lengthening (relaxation) in its antagonist.—*H. Banister* (Cambridge, England).

3060. **Crozier, W. J.** *Tropisms.* *J. Gen. Psychol.*, 1928, 1, 213-238.—A partial summary of a miscellaneous and somewhat disconnected group of quantitative studies of tropistic behavior, with elementary mathematics. Since some animals' direction of movement can be partially predicted when more than one orienting force is at work, it is suggested that it may be possible to apply a second-order test of theories of oriented movement. In this way information may be obtained in the future about central nervous states and peripheral sen-

sory processes. The discussion is mainly concerned with the author's previous publications.—*H. Cason* (Rochester).

3061. **Fessard, A.** *Le mouvement volontaire d'après K. Wachholder.* (Voluntary movement according to K. Wachholder.) Paris: Chahine, 1928. Pp. 70. 10 fr.—The author presents a study of Wachholder's researches with a view to seeking the relationship between the mental project and the realization of movement. (1) For a determined functional group, how does the activity of the different muscles change when the mental project changes? (2) To what extent does the realized movement correspond to the exigencies of the project? It is this which the author terms the problem of coördination. A bibliography of 36 titles concludes the work.—*Math. H. Piéron* (Sorbonne).

3062. **Filimonoff, I. N.** *Zur Frage der Konstruktion der willkürlichen Bewegungen im Ellenbogengelenk.* (The construction of voluntary movements in the elbow joint.) *Zsch. f. d. ges. Neur. u. Psychiat.*, **111**, 383–416.—The distribution with respect to velocity of voluntary movements, a free flexion and extension, in lesions of the afferent system is characteristically different from that in lesions of the pyramidal or extrapyramidal tract. This distribution agrees with lower reflexes so that the elementary voluntary movements seem to be determined subcortically. In normal conditions the releasing of the flexor is different from that of the extensor, and the extensor back stroke is stronger than the flexor. All types are carefully arranged from ten points of view, of which the last has to do with the two-peaked nature of the curve, which is especially characteristic for pyramidal disturbances, particularly in the extensor curve.—*W. Wirth* (Leipzig).

3063. **Hoff, H., & Schilder, P.** *Der Verlauf der Lagebeharrung.* (The process of position perseverance.) *Monatsschr. f. Psychiat. u. Neur.*, 1927, **66**, 356–359.—The after-effect of a given position, which attempts to bring the newly disposed limb into the old position, is studied by holding the arm first in an over-horizontal position and then in a horizontal one. A phasic process is established for the position perseverance, as is the case with other induced tonic effects.—*W. Wirth* (Leipzig).

3064. **Leisse, —.** *Raumwahrnehmung und Vestibularapparat (Bemerkungen zur Arbeit von Noltenius in Bd. 116, 3 dieses Archives.)* (Perception of space and the vestibular apparatus. Remarks on the work of Noltenius, vol. 116, No. 3, this journal.) *Arch. f. Ohrenheilk.*, 1927, **117**, 62–66.—The author denies the common belief that the vestibular apparatus makes possible the release of a reflex not specifically conscious, and that the normal reaction in the case is in no way connected solely with the otoliths, but that it occurs also without function of the otoliths with preservation of the semicircular canals.—*W. Wirth* (Leipzig).

3065. **Méthnikow, S., & Chorine, V.** *Rôle des reflexes conditionnels dans la formation des anticorps.* (The rôle of conditioned reflexes in the formation of antibodies.) *C. r. Soc. biol.*, 1928, **99**, 142–145.—Experiments were made on rabbits, which received daily two cubic centimeters of a warmed emulsion of cholera vibrios. Each injection was preceded by an external stimulus (warming of an ear for a two-minute period). These experiments showed that it is possible to bring about immunity reactions (reactions of the cells and formation of antibodies) not only by injections of antigens into the blood, but also by conditioned stimulation, that is, by intervention of the nervous system.—*Math. H. Piéron* (Sorbonne).

3066. **Nakamura, H.** *Experimental study in reaction time of start for running race.* *Jap. J. Psychol.*, 1928, **3**, 231–262.—Reaction time of track runners at the start was measured by the following set-up: The pull on the trigger of the pistol closes a circuit and starts the chronoscope; the release of the hands of

the runner at a crouching position off the ground as he starts out opens the circuit and stops the chronoscope. 10 runners were tested; 13 measurements were taken from each, and the first 3 measurements were discarded. The mean reaction time of these ten men was found to be  $179.63\sigma \pm 11.156$  (m.v.). The mean normal reaction time of the same men tested indoors by the sound hammer apparatus was  $132.98\sigma \pm 8.742$ . Next the interval between "get set" and the pistol was varied; three intervals, 1 sec.,  $1\frac{1}{2}$  sec., and 2 sec. were used. Each of the ten subjects was tested 36 times, resting 5 minutes between tests. The interval was changed from test to test irregularly. The mean reaction time at 1 sec. interval was  $198.92\sigma \pm 19.75$ ; at  $1\frac{1}{2}$  sec. interval,  $170.75\sigma \pm 11.348$ ; at 2 sec. interval,  $201.87\sigma \pm 18.714$ . The  $1\frac{1}{2}$  sec. interval gave the shortest reaction time. There was no significant difference in reaction time between the two cases, one when tested alone, the other when tested with another at competition.—*J. G. Yoshioka* (California).

3067. **Pollock, L. J.** **Muscle tone.** *J. Amer. Med. Asso.*, 1928, 91, 221-223.—Muscle tone may be produced by a stretch reflex. It may also be produced by reflexes other than stretch. Tonic, labyrinthine reflexes produce a change in the physical property of muscle which permits it to be purely mechanically stretched, while other reflex adaptations occur. Although investigations show that most of the mechanisms dealing with tone as interpreted by decerebrate rigidity have a neural basis, it does not follow that other mechanisms are not involved.—*G. J. Rich* (Bellevue Hospital).

3068. **Reiner, H.** **Freiheit, Wollen und Aktivität.** *Phänomenologische Untersuchungen in Richtung auf das Problem der Willensfreiheit.* (Freedom, willing and activity. Phenomenological investigations in the direction of the problem of the freedom of the will.) Halle: Niemeyer, 1927. Pp. 172. 6 Rm.—In conjunction with certain publications of Husserl, Hildebrand, Pfänder and Stein, the author hopes to give in this dissertation analyses of conscious phenomena which might be of considerable significance also for psychology. The following sentences define the nature of freedom as treated by him: "Everything which we have described here under the title Freedom we could contrast as *freedom for something* with *freedom from something*." "The distinction of this freedom from the one treated by us is important in so far as such freedom from inhibition does exist when it appears to me self-evident that something should be done, that is, when I am not free in a deterministic sense" (p. 162). The phenomenological investigations are influenced by the thought that psychological dispositions do not attain conscious representation in every single case. What can be and what cannot be immediately experienced, and what can be the actual experience on which consciousness of freedom is based, is determined through phenomenological analysis. Consciousness of freedom is essentially dependent on consciousness of the "I can," i.e., "I can now do this and that." Wherever questions of value show an influence the author speaks of a second, higher concept of freedom. In general, freedom is the "view of one's ability" (*Sicht eigenen Könnens*). Activity is the way in which freedom is realized. Willing is analyzed searchingly with "mathematically exact enumeration of existing possibilities." Here and there the author also slips into a causal form of discussion.—*H. Jancke* (Bonn).

3069. **Renshaw, S., & Postle, D. K.** **Pursuit learning under three types of instruction.** *J. Gen. Psychol.*, 1928, 1, 360-367.—3 groups of 5 subjects each learned to operate a pursuitmeter, while working under different instructions, the conditions being such that the subject's implicit language responses were factors in the learning. When S first learns the pursuit act linguistically, the acquisition of manipulatory skill is impeded. It seems that significant progress is made only after the S stops implicit speech directions and shifts to a method

of sheer manipulation. "*Einstellung* is controllable only in part by imposed linguistic instruction. Within limits and for certain specific tasks the verbal part of habits may help to foreshorten the learning series. Beyond these limits (at present undetermined) and for other types of skills it may actually impede or hinder progress. The general case in which language inhibits is one in which substitutive or surrogatory verbal habits cannot be made effective substitutes for the direct sensory stimuli afforded by the task itself." 1 table and 1 figure.—*H. Cason* (Rochester).

3070. **Sagin, K.** *Quelques observations à la publication de Vizioli sur le phénomène de Piotrowski et le reflexe du malléolus extérieur.* (Some observations on Vizioli's article on the phenomenon of Piotrowski and the reflex of the external malleolus.) *Riv. di pat. nerv. e ment.*, 1928, **33**, No. 1.—Vizioli found the phenomenon of Piotrowski and the reflex of the external malleolus (plantar flexion following the stimulation of the anterior tibia) in 50% of neurasthenics and in 75% of the hysterics. He thus denies these two phenomena the value of pathognomonic signs of an organic lesion, and maintains that neither one has ever been shown to exist in cases of functional hyperreflexivity.—*G. Corberi* (Milan).

3071. **Sicco, A.** *Psychophysiologie et psychopathologie du corps thyroïde.* (Psychophysiology and psychopathology of the thyroid body.) Paris: Alcan, 1928. Pp. 104. 10 fr.—(Preface by G. Dumas.) The endocrine glands exercise over the organism a far-reaching and complex action, which may be divided into three principal activities (sleep-regulation, chemical regulation, and nerve regulation) which, although differing in their extreme effects, are probably only three manifestations of the same agent. It is in relation to this hypothesis that the author interprets the study of the relationship between the mind, the form of the body and nutrition. After examining the mental symptoms of endocrine diseases (hypophyseal mentality, adrenal psychism), he describes the endocrine symptoms of mental diseases. He then attempts to show how the hormones influence the mind: the anatomical, physiological and psychological mechanisms; the affective life and the tendencies of glandular origin. Finally he reviews the mental states and the psychoses accompanying the pathology of the thyroid, myxedematous idiocy of Bourneville, Bourneville's disease, Basedow's disease, and mania. A bibliography of 50 titles concludes the volume.—*Math. H. Piéron* (Sorbonne).

3072. **Wegener, H.** *Der gekreuzte Adduktorenreflex.* (The crossed adductor reflex.) *Monatsschr. f. Psychiat. u. Neur.*, 1927, **66**, 342-335.—The crossed adductor reflex is an expression of a functional accessory connection which is always present latently, and is very similar to the proprio-reflexes. It is not pathological if isolated and bilateral, only when unilateral. It is thus frequently a symptom accompanying the spastic reflexes. In bilateral involvement of the pyramidal tracts the crossed adductor reflex is also almost always bilateral.—*W. Wirth* (Leipzig).

3073. **Willoughby, R. R.** *The efficiency of muscle.* *J. Gen. Psychol.*, 1928, **1**, 382-383.—Criticism of P. H. Mitchell's statement that a muscle does its maximum work when carrying a load that is neither too large nor too small. The work peak shown in the graphs is an artifact due to the arbitrary doubling of a factor in the computations, thereby necessarily resulting in a curve of parabolic form.—*H. Cason* (Rochester).

[See also abstracts 2986, 2993, 3023, 3076, 3105, 3106, 3120, 3144, 3189, 3237, 3313.]

## PLANT AND ANIMAL BEHAVIOR

3074. **Boutan, M. L.** *Quelques observations sur l'attention chez un Prosimien (Lemur macaco L.).* (Some observations on attention in a prosimian, *Lemur macaco L.*) *C. r. Cong. soc. savantes*, 1928, 347-366.—Experiments which were made on a prosimian and a little dog showed that attention artificially maintained in action fatigues the animal in the absence of all active labor, and that certain of the animal's reactions which are generally considered as manifestations of attention were in reality reactions subordinated to reflexes and without any necessary relation to the intellectual center. The author distinguishes between *attention* on the one hand and *alertness* on the other, the latter including the mass of unintellectual reactions.—*Math. H. Piéron* (Sorbonne).

3075. **Bull, H. O.** *Studies on conditioned responses in fishes.* Part I. *J. Marine Biol. Asso. of The United Kingdom*, 1928, New Ser., 15, 485-533.—The author here reports results of his studies made at the Plymouth Laboratory of the Marine Biological Association. His summary follows: "It has been shown by experiments formulated upon the 'conditioned response' principle that the blenny, *Blennius gattorugine*, is able to perceive and to profit by very small changes in its environment. This fish is able to form conditioned motor responses using food as unconditioned stimulus, towards a momentary increase of 0.4° C., or more, in the temperature of the surrounding water. It is also able to form similar conditioned motor responses towards a momentary decrease in the salinity of the surrounding water, of as little as 3 parts per 1000, or towards a change of greater magnitude (up to 37 parts per 1000). Conditioned responses have been established in the wrasses, *Crenilabrus melops* and *Labrus bergylta*, toward visual stimuli of varying kinds. It appears that these fishes can discriminate after differential training between one or two sources of light, and between monochromatic red, green, yellow, or violet light, but not readily between even comparatively large differences in intensity of a luminous source. These results are those obtained upon 'dark-adapted' fishes. More extensive experiments will be necessary before a final statement is made upon their capacity of color discrimination. Using an electric shock as an unconditioned stimulus it has been shown that *Blennius gattorugine* can also form visual conditioned responses towards monochromatic red and towards monochromatic green light; and that it can, by the method of 'differential inhibition,' distinguish red from green, and red from closely allied shades of grey. Conditioned responses have been formed in the wrasse, *Crenilabrus melops*, towards vibratory stimuli, using a tuning-fork of 128 D.V.'s per second, and food as unconditioned stimulus. A conditioned response towards the vibrations from an electric buzzer has been formed in the common eel, *Anguilla vulgaris*, using an electric shock as unconditioned stimulus. Up to the present time it has not proved possible to establish conditioned responses in *Blennius gattorugine* towards the vibrations produced by the tuning-fork, a submerged telephone transmitting the same note, or towards the basic note of a key D tin-whistle, arranged as a closed pipe. Many of the phenomena relating to conditioned reflex formations in mammals are shown to occur during the formation of similar responses in fishes. Froloff's observations have been confirmed in most respects." In each experiment from 2 to 5 specimens were used.—*L. M. Harden* (Clark).

3076. **Busquet, H.** *Détermination et retour des caractères de masculinité chez les chapons et les vieux coqs par le sérum de jeunes animaux mâles.* (Determination and return of male characteristics in capons and old cocks by means of serum from young male animals.) *Bull. méd.*, 1928, 42, 12-13.—These experiments prove the possibility of treating efficaciously an individual possessing an endocrine deficiency by means of injecting serum from a normal individual.—*Math. H. Piéron* (Sorbonne).

3077. Claude-Joseph, Frère (Janvier, H.). *Recherches biologiques sur les Prédateurs du Chili.* (Biological researches on the Predators of Chile.) *Ann. des Sci. nat.*, 1928, **11**, (10th ser.), 67-207.—(68 figures.) From among the very interesting biological observations made by the author, the following cases may be chosen: (1) A curious case of localization of the nests in space in *Crabro brevinodus* Spin. is cited. These insects build their nests in bamboo stalks and in stakes, the larvae being nourished on plant-lice. When the author removed the stakes during the period of nest-building, the wasps, clasping their prey, flew for two days at the height of their nest over the site, although all landmarks had been wiped out. (2) An example of recognition of the females in sand in *Bembex brullei* Spin. is given. These insects have their nests in the sand. At hatching time the males, who emerge first, dig up corridors which they quickly abandon. These attempts at corridors are nearly always oriented towards the cells of the females, who are not yet freed. In the species *Microbembex sulfurea* Spin., it is through auscultation of the surface of the sand by means of their antennae that the males discover the lodging-place of the females. (3) A study of return to the nest is cited. In *Bembex brullei* Spin. olfaction guides the return to the nest. In *Sceliphron vindic* Lep., on the contrary, visual landmarks are the cues, while in *Sphecodes latreillei* the rôle of visual landmarks is predominant but not exclusive. When some of the species *Monedula chilensis* were taken from their nest to a strange place by a route describing a right angle, they took the shortest road home. Even the insects did this whose antennae had been sectioned by the author. (4) Observations were given on groupings made in sheltered places. The case is given, first, of the species of *Sphecodes*, the males of which attack each other fiercely during the day but join together at night, keeping each other warm. Then, in *Monedula chilensis*, the males and females lodge on sheltered trees regardless of species, forming large groups to pass the night.—*Math. H. Piéron* (Sorbonne).

3078. Comignan, J. *Étude du fouissement des scarabées en rapport avec leur activité générale.* (A study of digging in beetles in relation to their general activity.) *C. r. Soc. biol.*, 1928, **98**, 1410-1412.—Beetles do not immediately begin eating their food. They form first of all an alimentary ball, cart it away, and bury it. Exterior surroundings, particularly heat, modify the succession of phases. Light and heat above 21° C. exercise an attraction which hinders digging, unless the heat goes beyond 24°. But if the insect, subjected to more than 24°, is very hungry and is put in the presence of his food, he will eat it immediately. The behavior of the beetles clearly corresponds to the conditions of their environment.—*Math. H. Piéron* (Sorbonne).

3079. Köhler, W. *L'intelligence des singes supérieurs.* (Intelligence of the higher apes.) (Trans. from the German by P. Guillaume.) Paris: Alcan, 1928. Pp. 318. 50 fr.—The book is divided into two parts: (1) The greater part of this appeared in the Memoirs of the Academy of Berlin under the title *Testing the Intelligence of the Anthropoids*. (2) The psychology of the chimpanzee has been published in the first number of *Psychol. Forsch.* An important preface by the translator explains Köhler's ideas and relates his experimental findings to his conception of the theory of form.—*Math. H. Piéron* (Sorbonne).

3080. Mayeda, T. *De l'effet de la réaction pH du milieu sur le galvanotropisme de la Paramécie.* (The effect of the pH reaction of the medium on the galvanotropism of *Paramecium*.) *C. r. Soc. biol.*, 1928, **99**, 108-110.—The author made a systematic investigation of the influence of the hydrogen-ion concentration on the galvanotropism of *Paramecium*. This organism shows a cathodal galvanotropism before as well as after washing with distilled water, in spite of Baneroff's observations to the contrary. Beginning with a solution of neutral reaction, the *Paramecium* shows galvanotropism up to the time that the

pH value becomes 4.0; following that the tropism becomes weakened and disappears in proportion to the diminution of the pH. On the contrary, if pH is increased the *Paramecium* shows a cathodal galvanotropism until pH reaches 9.0, then there appears anodal galvanotropism until pH reaches 10.3. If a drop of NaOH or KOH is introduced into the solution near one of the poles, the *Paramecium* withdraws by following the diffusion of the alkali. If the drop is placed near the cathode, the *Paramecia* turn toward the pole, but remain in a circle around the alkaline liquid. If the poles are then quickly exchanged, the majority of the animals move toward the new cathode.—*Math. H. Piéron* (Sorbonne).

3081. **Picard, F.** *La parasitisme et l'hyperparasitisme chez le Torymus nigricornis Boh. (Hymenoptera, Chalcididae.)* (Parasitism and hyperparasitism in *Torymus nigricornis* Boh. [Hymenoptera, Chalcididae.]) *Bull. soc. entomol. de Fr.*, 1928, No. 6, 109-111.—The report presents observations made on the behavior of the chalcidid. The females lay their eggs in oak-galls, and their larvae develop at the expense of the host or at the expense of an earlier parasite of the gall. This latter fact takes place even if the first parasite is a larva of the same species. The author observes that this behavior cannot be interpreted as useful to the species.—*Math. H. Piéron* (Sorbonne).

3082. **Rochon, —, & Duvigneaud, —.** *La forme et les mouvements de la pupille dans la série des vertébrés.* (The form and movements of the pupil in the vertebrate series.) *Bull. de Soc. d'ophtal. de l'est de la France*, 1927, July 3.—The iris is, from the very beginning of the series, a diaphragm eliminating the peripheral parts of the cornea and correcting their spherical aberration. By contracting, the pupil is able to keep its round form or take various forms. The author endeavors to find the value and the purpose of these different forms of contraction, and to discover what influence various forms of the pupil can have on vision, and, also, to determine in what relation the pupil stands to the habits and behavior of the animal. He reviews the pupil forms in the entire vertebrate series.—*Math. H. Piéron* (Sorbonne).

3083. **Usnadze, D.** *Zum Problem der Relationserfassung beim Tier.* (The apprehension of relations by the animal.) *Arch. f. d. ges. Psychol.*, 1927, 60, 361-390.—The author describes experiments performed upon a dog which furnish a demonstration of *Strukturfunktion* by the conditioned-reflex method. The flexion-reflex provoked by electric shock was conditioned by tonal stimuli. It was the author's purpose to determine whether the dog could be trained to discriminate the intensity-relation between two successive tones, so that he would react only when the second tone was louder than the first. In an incidental series of experiments, the fact was established that the dog could discriminate individual tones according to their intensities. In the principal series, the animal was conditioned by a pair of successive tones having the same pitch, the second tone ( $T_2$ ) being louder than the first ( $T_1$ ). The tones were separated by a pause of 1-2 seconds, and  $T_2$  was followed after 1-2 seconds by a shock. After a prolonged period of conditioning came the discrimination-tests. Pairs of tones having unfamiliar relations ( $T_1$  louder than or equal to  $T_2$ ) were occasionally introduced (without electric shock). At first the animal would usually react to these test-pairs. But after numerous repetitions of the tests he was eventually able to discriminate 71% of these stimuli, in spite of the fact that the various pairs were at different levels of absolute intensity. Furthermore, when the quality of the stimuli was changed—tones of another pitch, or the sounds of an electric bell, being substituted for the familiar type of stimulus—the intensity-relation was discriminated about equally often. Thus the animal's apprehension of the relation is, at least to a certain degree, independent of the nature of the relata. The building-up of the conditioned reflex to the intensity-relation is a gradual process containing the following phases: (1) At first the reflex is simultaneous

and is evoked sometimes by  $T_1$ , sometimes by  $T_2$ , and sometimes by each of these stimuli. (2) Next, the reflex becomes successive, and is evoked by each sound individually. (3) There is a critical moment at which the reaction begins to be governed by the stimulus-complex rather than by the individual stimuli. The reflex becomes a successive response to  $T_2$ , but it is still unaffected by the relation between the stimuli. (4) Finally, this relation becomes a determining factor. It does not appear that a sudden insight-experience occurs at any time during the above process. When the interval between the sounds was increased to 3-5 seconds it was found almost impossible to build up a conditioned reflex to the intensity-relation. The author proposes a physiological theory of his experiment, basing it largely upon Köhler's doctrine of successiv...—*D. McL. Purdy* (California).

3084. **Walls, G. L.** **The photo-mechanical changes in the retina of mammals.** *Science*, 1928, **67**, 655-656.—Experiments upon deer-mice show that the position of the retinal pigment is identical in the two eyes of the same animal when one has been fixed before and the other after exposure to light. It appears that migration of the pigment under the action of light does not occur in the mammalian eye. As rapid change in the pupil developed in the process of orthogenesis, the need for pigment migration as a protective process disappeared.—*G. J. Rich* (Bellevue Hospital).

3085. **Werner, C. F.** **Die Funktion der Fischotolithen.** (The function of the otoliths in fishes.) *Arch. f. Ohrenheilk.*, 1927, **117**, 69-77.—The author, on the basis of his experiences in regard to the sacculi of fishes, which have been published in complete form in a zoological journal, rejects the previous gross mechanical theory of the manner in which the otoliths act on the sacculus (concerning the utriculi it may not yet be determined). His point of view is very much like that of Wittmaack in regard to cuticular imagery, and he says that the otolith as a result of its weight indicates a difference in pressure between the fluid of the labyrinth spaces and the cupula (otolith membrane), mostly without actual movement of the otoliths.—*W. Wirth* (Leipzig).

[See also abstracts 3015, 3051, 3060, 3065, 3094, 3095, 3138.]

## EVOLUTION AND HEREDITY

3086. **Barker, L. F.** **Relation of heredity and early environment to character formation.** *So. Med. J.*, 1928, **21**, 50-53.—(From *Eug. News*).

3087. **Baron, J.** **Begabtenverteilung und Vererbungsforschung.** (The distribution of the gifted and the study of inheritance.) Braunsberg: Ermländ, 1927. Pp. 107.—Mainly a criticism of the customary methods of study of the gifted and the conclusions drawn from the statistics. That the highly gifted occur with much greater frequency in the upper social circles is wholly unproved. Statistics with relation to the higher schools in Prussia make this doubtful. (From a review by Schlesinger.)—(From *Eug. News*).

3088. **Boyle, M. E.** **In search of our ancestors.** Boston: Little Brown, 1928. Pp. 287.—(Preface by Abbé Henri Breuil.) An attempt to retrace man's origin and development from later ages back to their beginnings.—(From *Eug. News*.)

3089. **Briand, —.** **Hérédité des maladies mentales.** (Heredity of mental diseases.) *Prog. méd.*, 1928, No. 13, 523-529.—A general review of the question followed by a bibliography of approximately 25 titles.—*Math. H. Piéron* (Sorbonne).

3090. **Crist, J. W.** **Foot-position in *Homo sapiens*.** *J. Hered.*, 1928, **19**, 229-234.—The author has tabulated the foot-positions of over 10,000 women in

three categories: straight, turned inward, turned outward. He finds that only 5% of the total number have the turned inward position, 53% are straight, and 42% are turned outward. The number turned outward increases with the age of the subjects, but this increase is shown to be largely due to the correlation of age with heaviness. Older women who are light are similar to the total group in proportions having foot-positions of the three kinds.—*B. S. Burks* (Stanford).

3091. **Fetscher, R.** *Gibt es familiäre Unterschiede der Wahrscheinlichkeit für Knabengeburten?* (Are there family differences in the probability for male births?) *Zsch. f. Sex.-wiss.*, 1928, **14**, 433-439.—A discussion of the factors in the determination of sex in children and the probable factors in the production of a disproportionate number of males to females. The summary of the article by the author is as follows: (1) There is a certain family tendency to an enhanced probability for male birth. (2) As a working hypothesis a sex-specific directed defence mechanism (*gerichtete Abwehrstoffe*) of the mother can be postulated which influences the bringing to full birth of male embryos. (3) The number of males is in part influenced by contraceptive methods and abortion. (4) Social and anthropological differences in the number of males are conjectures. (5) There does not exist a sure method of choosing the sex of children through the desires of the parents.—*W. Berry* (Rochester).

3092. **Gun, W. T. J.** *Studies in hereditary ability.* London: Allen & Unwin, 1928. Pp. 288. 10/6.—In this book the author traces the family connections of a number of famous historical figures of England and America. The antecedents and descendants of men and women known for such varied pursuits as literature, art, beauty, wit, gossip, statesmanship, and crime are described from authentic source material, many family groups are discussed in which ability of high order persists over a number of generations, and conjectures are made as to the channels of descent of outstanding traits in certain individuals.—*B. S. Burks* (Stanford).

3093. **Hankins, F. H.** *Organic plasticity versus organic response.* *Soc. Forces*, 1928, **6**, 331-334.—Environment can produce no response not inherently possible for the organism. Society cannot create personality, but only maintain conditions under which personalities may develop.—(From *Eug. News.*)

3094. **Harrison, J. W. H.** *A further induction of melanism in the lepidopterous insect, *Selenia bilunaria* Esp., and its inheritance.* *Proc. Roy. Soc. Lond. (B)*, 1928, **102**, 338-346.—Melanic insects have been produced by administering food containing manganese chloride. This melanism has been proved to be inherited as a Mendelian recessive. The effect is not of the Lamarekian type, but rather illustrates a new evolutionary principle, that heritable variations may be induced by means of the food supplied.—*H. Banister* (Cambridge, England).

3095. **Harrison, J. W. H.** *Induced changes in the pigmentation of the pupae of the butterfly, *Pieris napi* L., and their inheritance.* *Proc. Roy. Soc. Lond. (B)*, 1928, **102**, 347-353.—The pupae of *Pieris napi*, when developed from larvae exposed at the critical time to lights of different colors, are influenced in their pigmentation. The green color, acquired under the influence of orange light, is inherited.—*H. Banister* (Cambridge, England).

3096. **Hartson, L. D.** *Marriage statistics of Oberlin alumnae.* *J. Hered.*, 1928, **19**, 225-228.—Statistics upon Oberlin alumnae from 1837 to 1926 are tabulated especially with reference to the proportions graduating at different periods who would have married, the distribution of ages at which marriages took place, and the relative mortality of married and unmarried alumnae. The marriage rate varied for women graduating at different periods, but tended on the whole to be about 60%. Practically all of the marriages are now occurring during the first twelve years after graduation. The median age at time of marriage is about 26. The difference in the death rate of the married and the unmarried women is very marked, the unmarried surviving longest.—*B. S. Burks* (Stanford).

3097. Iwanowa, —. **Die Augen der Zwillinge.** (The eyes of twins.) *Russ. Arch. Ophth.*, 1927, **3**, 310.—The fact that uniovular twins never show a difference in refraction greater than 1 D is proof that the refraction of the eyes is heritable. (From a review by A. Samojloff.)—(From *Eug. News.*)

3098. Le Roy, G. **Les origines humaines et l'intelligence.** (Human origins and intelligence.) Paris: Boivin, 1928.—A review of courses and conferences.—*Math. H. Piéron* (Sorbonne).

3099. Lotka, A. J. **Sterility in American marriages.** *Proc. Nat. Acad. Sci.*, 1928, **14**, 99-109.—By an ingenious treatment of United States Census data the author finds that the gross sterility of the marriages of American whites amounts to 17.1%. When deduction is made for childlessness due to divorce or to premature death of a parent, the net sterility is found to be 13.1%.—*H. E. Jones* (California).

3100. Macfarlan, D. **Identical hearing in identical twins.** *Laryngoscope*, 1927, **37**, 846.—Hearing of middle-aged twin sisters tested by audiometer. Marked parallelism, the hearing rises and falls across the pitch range in nearly exact correspondence.—(From *Eug. News.*)

3101. Negus, —. **Observations on the evolution of man from the evidence of the larynx.** *Acta oto-lar.*, 1928, **12**, 93-118.—(From *Eug. News.*)

3102. Wagner, A. **Die Umwertung der Entwicklungslehre. Erster Teil: Entwicklungslehre und Abstammungslehre; Zweckhaftigkeit und Zweckmäsigkeit; Bastardierungsorschung und Vererbungslehre.** (New points of view in the appreciation of the theory of evolution. Part I: The theory of evolution and theory of descent; the tendency toward an end and conformity with the end; studies in hybrids and the theory of heredity.) *Scientia*, 1928, **43**, 135-145.—The theory of evolution is distinct from the theory of heredity. Evolution is directed toward an end. The fact that spontaneous hereditary variations do occur is of value to the theory of evolution more than to the theory of heredity. Periodic states of general tension may favor the appearance of these variations more at some times than at others.—*R. G. Sherwood* (Stillwater, Minn.).

3103. Willoughby, R. R. **Monogamy as a genetic factor.** *J. Gen. Psychol.*, 1928, **1**, 380-382.—Some miniature populations were made up and bred through one cycle by the method of artificial populations, with the aim of drawing attention to monogamy as a genetic factor. The data for the small populations are given in full. The question is raised as to whether increases in the monogamy index (proposed as  $M/2 P$ , where  $M$  = number of matings and  $P$  = population) tend to augment the population mean.—*H. Cason* (Rochester).

3104. Wingfield, A. H. **Twins and orphans: the inheritance of intelligence.** London & Toronto: Dent, 1928. Pp. 127. \$2.50.—The study is a doctor's dissertation worked out at The University of Toronto. A fourth of the book is devoted to a summary of the field. The remainder is devoted to original data and interpretation. The original data consist of mental and educational tests upon 102 pairs of twins attending public schools, and upon 29 children who had spent at least 25% of their lives in an orphanage. The measure of intelligence used was the composite intelligence quotient obtained by averaging the mental age from the National Intelligence Test with that from the Multimental Scale. The Stanford Achievement battery, the British Columbia arithmetic test and the Morrison-McCall spelling scale were also administered. Full statistical treatment is given to the data. The results are employed to draw a number of conclusions, the most striking of which are: Twins as a group are very slightly below the average in general intelligence, but show about the same degree of variability as unselected children. Orphan children are below the average intelligence of unselected children. There is no significant difference in the amount of resemblance in mental traits between younger and older twins. Twins are no more

alike in those traits upon which the school has concentrated its training than in general intelligence. Physically identical pairs show a higher degree of mental resemblances than fraternal pairs.—*B. S. Burks* (Stanford).

[See also abstracts 3019, 3240, 3263.]

#### SPECIAL MENTAL CONDITIONS

3105. **Bekhterev, V. M.** Über die Perversion und die Abweichungen des Geschlechtstriebes vom reflexologischen Standpunkt aus. (I. Teil.) (Concerning the perversion and the abnormalities of the sex drive from the reflexological standpoint. Part I.) *Psychol. u. Med.*, 1928, II, 3, 197-204.—The concealment of normal sex stimuli, demanded by civilization, leads to substitution of secondary stimuli, thus opening the way for perversions. Bekhterev holds that all culture is an expression of instincts and all instincts are developed from reflexes. Despite current opinions, instincts, even in animals, are modified by environment. In Mammalia, the normal stimulus for the sex drive toward the opposite sex is the odor of secretions of sex organs. The wearing of clothes and social restrictions upon contacts between the sexes prevent this stimulus from being effective for civilized man. Secondary sex characters become effective stimuli only through association. Intimate contact between members of the same sex during the formative period sometimes gives rise to the wrong associations.—*M. F. Martin* (West Springfield, Mass.).

3106. **Bekhterev, V. M.** Über die Perversion und die Abweichungen des Geschlechtstriebes vom reflexologischen Standpunkt aus. (Fortsetzung.) (Concerning the perversion and the abnormalities of the sex drive from the reflexological standpoint. Conclusion.) *Psychol. u. Med.*, 1927, II, 4, 233-253.—Sexual perversions result from the fixation of an abnormal reflex under the influence of inadequate stimuli in the period when the sex instinct is first awakened. Bekhterev substantiates this hypothesis by case histories illustrating the origin of homosexuality, masochism, sadism, fetishism, and other sex perversions.—*M. F. Martin* (West Springfield, Mass.).

3107. **Bennet, E. A.** Fugue states. *Brit. J. Med. Psychol.*, 1928, 8, 143-149.—The patient, an Irish schoolmaster aged 37, had three fugues separated by thirteen and eight years. The content of the episodes themselves was recovered by hypnosis; analysis revealed the emotional states underlying them. The patient had since early childhood been reconciling his impulsive desires with the demands (unreasonable in childhood) of persons in authority by leading a consciously double life; the fugues supervened when discovery threatened, and afforded both escape from the intolerable situation and gratification for the desires. The analysis, though incomplete, resulted in insight and amelioration.—*R. R. Willoughby* (Clark).

3108. **Bianchini, M. L.** Psychologische und psychoanalytische Einfälle über die Klimakterium des Mannes. (Psychological and psychoanalytical ideas concerning the climaacterie in men.) *Zsch. f. Sex.-wiss.*, 1928, 14, 376-392.—A series of descriptions of the onset of old age found in classical and modern literature.—*W. Berry* (Rochester).

3109. **Bonjour, J.** La guérison des condylomes par la suggestion. (The cure of condylomas by suggestion.) *Schweiz. med. Woch.*, 1927, 57, 980-981.—Suggestion makes possible 95% of removals of warts and condylomas. The observation of the skin of patients shows a hyperemia of the warts and the unprotected or sensitive parts of the body where they are located. On the other hand, one finds in the course of psychotherapeutic treatment, that in proportion as the tumors disappear, the minimal pressure of the humeral and radial arteries

is reduced at the same time that their difference in tension returns to normal. There is thus proof that congestion of the papillae is the condition under which the formation and growth of the tumors occur; the physiological action of suggestion stimulates hypotension of the minimal pressure and that action reacts back upon the organic cells themselves. This permits the consideration of the papillomata and the condylomas as an early symptom and a precursor of disorders of the vaso-motor functions which may later lead to serious disorders.—*M. R. Lambiercier* (Geneva).

3110. **Burchill, S. C. Marcel Proust, an interpretation of his life.** *Psychoanal. Rev.*, 1928, 15, 300-303.—Proust's life was divided into two distinct parts by his mother's death when he was 40. In the first, he was a dainty exquisite of the *haut monde*—a dramatic representation of his negation of his father, who was vigorous; in the second, he sought to find his mother by regression, which deepened rapidly to death. His book, entitled *À la Recherche du Temps Perdu*, is to be regarded as an unconscious attempt of his feeble ego to reach a cure by the free association method.—*R. R. Willoughby* (Clark).

3111. **Burrow, T. The autonomy of the "I" from the standpoint of group analysis.** *Psyche*, 1928, 8, 35-60.—A gathering of individuals represents a situation in which the individual "I" may be better studied than singly. One's social medium impinges upon him so intimately that he is not aware of the fact. An examination of this sort makes us conscious of the fact that there is a social factor in our conduct with which we fail to reckon. The group principle of coordination gives the basis of analysis here sought. By studying the individual in the social medium in this objective fashion we may come to understand the individual himself. The abnormal sex life of persons, especially those who are neurotic, is thus brought to the surface. Also in such a situation the writer has observed just the distortions that occur in the neurotic individually. There is no doubt that much "mood-habituation" is inaccessible to present inquiry. We need to know just these inaccessible moods for the sake of a normal social consciousness.—*T. R. Garth* (Denver).

3112. **Davis, J. C. "If he should frown."** *Psychoanal. Rev.*, 1928, 15, 278-287.—Fantasy material.—*R. R. Willoughby* (Clark).

3113. **Delmas, A. Critique de la doctrine de Freud.** (Criticism of Freud's doctrine.) *Bull. méd.*, 1928, 42, 599-609.—The author first states the doctrine and its point of view, gives the theory of defective acts, pan-sexualism, repression, the interpretation of dreams, the genesis of psychoneuroses, and transference. Then he criticizes the method. He declares that with Freud the facts are intentionally chosen, a fact which removes all scientific value from them. He concludes by saying that Freud as a man shows the characteristics of a paranoic constitution such as is found in all dogmatists, doctrinaires, sectarians, and many visionaries.—*Math. H. Piéron* (Sorbonne).

3114. **Dummer, E. S. [Ed.] The unconscious; a symposium.** New York: Knopf, 1928. Pp. 260. \$2.50.—This collection of papers, as Ethel S. Dummer explains in the introduction, was designed to gather the ideas of a number of men representing different sciences and different points of view in psychology on the "Integrative action of the unconscious," as basic to an understanding of the thought processes. The papers are: C. M. Child, *The Beginnings of Unity and Order in Living Things*; K. Koffka, *On the Structure of the Unconscious*; J. E. Anderson, *The Genesis of Social Reactions in the Young Child*; J. B. Watson, *The Unconscious of the Behaviorist*; E. Sapir, *The Unconscious Patterning of Behavior in Society*; W. I. Thomas, *The Configurations of Personality*; Marion E. Kenworthy, *The Prenatal and Early Postnatal Phenomena of Consciousness*; F. L. Wells, *Values in Social Psychology*; and W. A. White, *Higher Levels of Mental Integration*. Child reviews the data from experimental embryology on

the problems of the basic properties of protoplasm and of the significance of environment for embryonic development as revealing the fundamental life processes of which the more complex functions are elaborations. Koffka contrasts the old associationist doctrine, with its concept of the unconscious as a storehouse of static ideas, and psychoanalysis, with its concept of the unconscious as a storehouse of dynamic impulses, with the concept of *Gestalt* psychology of the unconscious as non-process or physiological conditions which show certain tendencies or stresses toward completeness of certain types. Anderson describes how, through the early experiences of children, habits are built up which tend to greater and greater automaticity and which determine the influence of social situations met at the succeeding ages. Watson interprets the unconscious as the systems of unverbalized habits developed in early infancy and criticizes psychoanalysis as attempting the impossible when it tries to use verbal stimuli and responses to recondition such habits. Sapir, drawing his illustrations largely from the field of philology, argues that much of our social behavior is a matter of naïve practice rather than behavior we could consciously describe and justify. Thomas discusses personality as determined by the relative degree to which the desires for new experience, response, recognition, and security are developed and by the individual's definitions of different situations relative to these desires; and speaks of the unconscious as determining these, both by conservation of past experience as habit and by the elaborative, creative function of the unconscious. Kenworthy discusses the early emotional conditioning of children through physiological influences affecting them before birth, and through the experiences of birth itself and of the first few months of post-natal life. Wells deals primarily with the question of norms for social psychology, and suggests that values be measured in terms of the amount of energy realized and the effectiveness of this utilization from the standpoints of control of the environment, aesthetic character, and the reconciliation of the claims of different individuals for self-expression. White discusses development as consisting essentially of conflicts and adjustments between race-preservative and self-preservative tendencies within the individual.

—R. Leeper (Clark).

3115. **Freeman, W.** *Pathologic sleep.* *J. Amer. Med. Asso.*, 1928, 91, 67-70. —Experiments on animals seem to show that there are two mechanisms concerned in the production of sleep, a cortical and a diencephalic. These two are synergistic, but sometimes they respond to different chemicals in different and striking ways. Continuous sleep is always symptomatic, indicating a definite anatomical lesion. It may be caused by a tumor in any part of the brain or by such inflammatory changes as epidemic encephalitis or syphilitic meningitis. Narcolepsy is a syndrome characterized by paroxysmal attacks of sleep. It may occur without any recognizable cause or it may occur in the course of other diseases, notably as a sequel to epidemic encephalitis. It is very resistant to treatment.—G. J. Rich (Bellevue Hospital).

3116. **Freud, S.** *The future of an illusion.* (Trans. by W. D. Robson-Scott.) London: Hogarth Press, 1928. (International Psycho-analytical Library, No. 15.) Pp. 98. 6/—. —Civilization depends for its existence on a large degree of instinctual renunciation by individuals; the psychological problem of furnishing adequate compensation for the toleration of such renunciation has been largely one for religion (defined as a body of statements about reality which demands credence without being verifiable). This may now be recognized as an illusion, in the sense of a fantasied wish-fulfilment; and the system of observances connected therewith is seen to be of the nature of the typical obsessional neurosis of childhood, through which the individual progresses to the relative acceptance of reality characteristic of adulthood. The author maintains that the race has now reached the point where it can tolerate the frustrations of

life, and particularly of civilization, without the support of such a system, and urges the substitution therefor of an educational philosophy based on a collective endeavor to adapt to reality.—*R. R. Willoughby* (Clark).

3117. **Haas, J., & Lange, J.** *Neue Versuche zur vergleichenden Messung der Alkoholwirkung.* (New researches in the comparative measurement of the effect of alcohol.) *Psychol. Arbeit.*, 1928, **9**, 375-383.—The author methodically delimits and places on a secure foundation the alcohol research, established by Kraepelin and by Göring, for determining a pathological reaction (intolerance, pathological intoxication). He reviews some of the clinical researches which have been carried on in the meantime, dealing with pathological personalities. The question chiefly investigated is, whether a tendency to the abnormal alcohol reaction, when present, is revealed continuously during the investigation, or whether perhaps the condition at the time of the investigation is the decisive factor, whether or not the reaction is a morbid one. The conclusion reached is, that if the results remain always the same on the several days of the investigation, the morbid alcohol reaction may be assumed to exist; but if the several measurements vary it is necessary that exact clinical surveillance of the investigation, or exact observation of the person and addition of other methods, be used in order to verify the result.—*O. Graf* (Munich).

3118. **Hadfield, J. A.** *The reliability of infantile memories.* *Brit. J. Med. Psychol.*, 1928, **8**, 87-111.—It is not impossible that early memories arising in analysis should be veridical, since it is occasionally possible to verify objective occurrences so recalled; a certain amount of corroboration may sometimes be obtained from observations on children. The greater part of such memories, however, are incapable of absolute verification; but strong evidential weight may be obtained by observation of the course of the accompanying affect. The recalled experience may simply be lived over, without conspicuous verbal formulation; or the affect may filter into consciousness first, followed by the cognized experience and the description. No alterations of affect are to be observed in response to suggested formulations or to many recalled experiences, but emergence of a memory of a critical nature is accompanied by abreaction and the cure of symptoms.—*R. R. Willoughby* (Clark).

3119. **Herschan, O.** *Die weibliche Intersexualität.* (Intersexuality in women.) *Zsch. f. Sex.-wiss.*, 1928, **14**, 401-406.—The author attempts to analyze out the essential factors in women who display masculine sexual characteristics. These are to be found in the structure of the sex organs, in bodily habits, and in psychosexual behavior. Three types are distinguished: asthenic, hypoplastic and athletic. Examples of these types are found among suffragettes, women politicians, clubwomen and founders of "movements," women chauffeurs, and, in some countries, soldiers (women's corps). The etiology of intersexuality is a matter of germ plasm genotype stock which in puberty through endocrine defects becomes intensified. Bibliography.—*W. Berry* (Rochester).

3120. **Hirschmann-Wertheimer, I.** *Wechselseitige Beziehungen von Menstruation und Psyche.* (Reciprocal relations of menstruation and mind.) *Monatsschr. f. Psychiat. u. Neur.*, 1927, **66**, 215-254.—The author had a list of 24 questions answered which had to do with the affective reaction, sensitivity, ability to work and disposition. Most denied an increased sexual impulse during the period. 53 to 65 (81%) told of an increased love and need for husband and children, while 9% experienced a rather hostile disposition. Reference to the 5 Hauptmann groups leads essentially to the discussion of two main types, which seem to be dependent upon the direction of the impulse, the strength of the impulse and the environment. The one type is that of the woman who endeavors to attain her womanly occupation as wife and mother, the other is that of the one who emancipates herself from that calling, but in her periods thinks forcibly of it and thus develops a divided disposition.—*W. Wirth* (Leipzig).

3121. **Horney, K.** *Der Männlichkeitskomplex der Frau.* (The masculinity-complex of woman.) *Arch. f. Frauenkd. u. Konst.*, 1927, **13**, 141-154.—The author stresses a hitherto neglected psychoanalytic mechanism: woman's unconscious urge to achieve a masculine rôle not only in terms of social and political equality, but also more fundamentally in terms of anatomic and physiological identity. This mechanism is rooted in the early father-daughter and sister-brother experiences as well as in more universal phylogenetic factors such as primitive woman's constant exposure to male aggressions. The relationship of this complex to numerous neuroses constitutes the writer's central thesis.—D. B. Klein (Texas).

3122. **Hosiasson, —.** *La suggestion et le subconscient.* (Suggestion and the subconscious.) *Psychol. et vie*, 1928, **2**, 31-35.—Advice is given on how to avoid suggestion on the one hand and how to suggest other things or the same thing on the other.—Math. H. Piéron (Sorbonne).

3123. **Jung, C. G.** *Die Beziehungen zwischen dem Ich und dem Unbewussten.* (The relation between the ego and the unconscious.) Darmstadt: Otto Reichl, 1928.—The unconscious comprises external forces as well as all that have become subliminal (*unterschwellig*), subliminal sensory perceptions, seeds of later conscious content. It is active—in normal conditions compensating for the conscious, only to be thought of as independent in pathological cases. Assimilation of the personal unconscious widens especially the moral consciousness (self-knowledge). The collective unconscious produces archaic images. As a consequence of assimilation either optimistic self-reliance or resignation appears upon change of the collective mind as a necessity for the development of personality. The *persona* is not an individuality, but only a voluntary sector of the collective mind, the selection in any case already individually colored. Moreover, in the reactions of the unconscious constellated by it are dispositions to the development of the individual. By means of analysis of the personal unconscious, collective material is at once added to the conscious with the elements of the individuality. The disorganization of the *persona* releases involuntary phantasies. The conscious becomes insensible to that which is introduced. The loss of equilibrium conditioned thereby is an appropriate one—granted that the conscious is able to understand the contents produced by the unconscious, otherwise inflation develops, psychosis; or else regressive reintegration of the *persona*. The result is in part independent of the manner in which the analyst treats the transference—reductive theories do not fit the phenomena. If upon identification it remains with the collective mind the result is the "prophet" or the "child of the prophet." In contrast with self-disorganization is self-realization through the process of individuation, in which the self is freed from the false shell of the *persona* on the one hand and the suggestive power of the unconscious images on the other. The self is the totality of the conscious and the unconscious, thus something greater set over the ego. If the functions belonging inward turn habitually outward psychic sex changes (perversions) are produced. The technique of the education of the *anima* rests upon the personal character (autonomy) of the complex concerned, which is connected with every dissociation. The change in the unconscious which results from its composition uses phantasy images in which the libido is tangible—it always appears in a certain form. The result is the attainment of the "nucleus of personality." Thus a function has developed from the independent existence of the *anima*. The aim of individuation is attained with the self which the ego does not oppose, does not subjugate, but to which it adheres. The ego is the unique content of the self which we know, the individuated ego senses itself as object of an unknown subject set over it. This "transcendental postulate" may be an image, but yet one in which we are contained.—W. M. Kranefeldt (Zurich).

3124. **Kamiat, A. H.** *The cosmic phantasy*. *Psychoanal. Rev.*, 1928, 15, 210-219.—A person's cosmic, race, or group phantasy reflects his own inner conflicts, and it, together with the delusion of infallibility, compensates for the feeling of inadequacy to life's situations.—W. Dennis (Ohio State).

3125. **Kanner, L.** *Folklore of the teeth*. New York: Macmillan, 1928. Pp. xiii + 316. \$4.00.—A contribution to what may be termed the symbolism of superstition with particular reference to the folk-lore of the teeth. The author's purpose is to introduce a new branch of dental science, just as the folk-lore of medicine is considered a branch of medical science. There is discussed in turn the number, shape and eruption of the teeth, popular dental hygiene, toothache and its cure, artificial deformation of the teeth and the use of teeth outside the oral cavity as tools, medical instruments, drugs, amulets, charms, reliques and jewelry. Under each of these headings there are detailed the superstitions, traditions, legends (the golden tooth), proverbs, folk songs, charms and incantations which center around the teeth, the pathologic and therapeutic beliefs and measures, the development, number and position of the teeth, their diseases, loss and the various artificial forms of their mutilation. The popular toothache cures are discussed from various angles, such as the treatment by plants, animals, human organs and secretions, inorganic substances, prayer, incantations, etc., and finally the transference of the toothache or its symbolic equivalent from the sufferer to some other object. The names of the saints appear in many of the toothache prayers, particularly of Saint Apollonia, the patroness of toothache. Throughout the volume it is shown that the teeth possess not only a literal but also a symbolic significance in human culture. The volume is well documented, there is a glossary, an extensive bibliography and seventeen illustrations.—I. H. Coriat (Boston).

3126. **Lambert, H. C.** *General survey of psychical phenomena*. New York: Kriegerboeker, 1928. Pp. 23 + 165. \$2.50.—(15 plates.) Part I consists of a "general survey of psychical phenomena," and follows the lead of those investigators who accept physical as well as mental claims in this field, rather than those who are satisfied with the former, as too subject to possibilities of sensory illusion. What is drawn from the works of Geley, Crawford and Sudre on the one hand, and from Myers, Hodgson and Hyslop on the other, will have weight according to the reader's estimate of the clearheadedness and judgment of those writers, respectively. Part II deals mostly with the author's own experiences, of a sufficiently vivid character. Of readers able to read such literature calmly, probably more will feel competent to posit normal explanations for the feats of Hannegan's physical mediumship than will find it easy to frame a reasonable one for the seeing, simultaneously by Mr. and Mrs. Lambert, of an apparition of her deceased brother, as she awoke from a "dream" wherein he imparted to her some curious information afterward verified. The chapter on "psychic photography" viewed as evidence will receive opposite reactions from readers. The book ends with an illustrative exposition of Titus Bull's method of treating mentally deranged patients, involving the use of a "medium," experiments valuable for their alleged therapeutic results, however the underlying process is to be identified.—W. F. Prince (American Society for Psychical Research).

3127. **Lewis, N. D. C.** *The psychobiology of the castration reaction*. *Psychoanal. Rev.*, 1928, 15, 174-209.—(Continued—see II: 677, 1231.) Nine case histories of overt castration and self-mutilations. The writer believes these to be due to the incest mechanism, which breaks through and expresses itself in the overt castration phenomena. Accordingly, he suggests it be named the Eshmun complex, after a Phoenician deity who emasculated himself to escape the mother-goddess. In Part VII on *Suicide and Death*, the analytic literature on the subject is reviewed and 3 case histories given.—W. Dennis (Ohio State).

3128. **Lewis, N. D. C.** **The psychobiology of the castration reaction.** *Psychoanal. Rev.*, 1928, **15**, 304-323.—The conclusion of a serial article (see II: 677, 1231, 3127). A classification is formulated and considered in detail; its main headings are *Endogenous*, *Ambigenous* and *Exogenous*, and subdivisions cover overt and implicit reactions and the principal psychotic types referable to this reaction. Several case studies are presented, and the observations are brought into relationship with Freud's broader death instinct formulations. Bibliography of 91 items.—*R. R. Willoughby* (Clark).

3129. **Logre, —.** **L'automatisme mental.** (Mental automatism.) *Bull. méd.*, 1928, **42**, 207-209.—The author presents an explanation of the concept of Clérambault, who first isolated the syndrome of mental automatism which bears his name to the present day.—*Math. H. Piéron* (Sorbonne).

3130. **Lorand, A. S.** **A narcissistic neurosis with hypochondriac symptoms.** *Psychoanal. Rev.*, 1928, **15**, 261-277.—The patient, aged 20, had been classified as manic-depressive; he was depersonalized, afraid of suicide and of insanity, and had numerous complaints centering about the stomach, throat and eyes, the strongest being the fear of choking. Analysis lasted about 275 hours, and was moderately successful; the fundamental difficulty was that the father was cruel and capricious in his treatment of the patient, and was so incorporated into the ego-ideal, which accordingly made excessive demands on the already weak ego. A mother-sister identification with incest components served as a refuge from growing up, but also led to increased self-punishment in the illness. Bibliography of 18 items.—*R. R. Willoughby* (Clark).

3131. **Meyer, E.** **Die forensische Bedeutung des Morphinismus.** (The forensic importance of morphinism.) *Arch. f. Psychiat.*, 1927, **81**, 500-521.—The requirements in individual cases are discussed on the basis of the law concerned; the relation to other intoxications is brought out; new legal provisions are examined closely. In conclusion the author appeals to the conscience of doctor and druggist.—*W. Wirth* (Leipzig).

3132. **Moxon, C.** **The bearing of Rank's discovery on medicine.** *Psychoanal. Rev.*, 1928, **15**, 294-299.—Rank's formulation of maladjustments as failures in reaction to a series of potentially traumatic normal situations, all reactivating the anxiety situation of birth, makes possible for the first time a comprehensive genetic psychology built upon psychoanalytic data. In addition, it yields new viewpoints on the relation between psychoanalysis and medicine; the former is rather education than psychotherapy; the work to be done is not to cure a disease, but to enable the ego, by giving up the infantile attachment, to tolerate frustrations.—*R. R. Willoughby* (Clark).

3133. **Offergeld, H.** **Hormonale Beeinflussung der weiblichen Libido.** (Hormonal influence upon female libido.) *Zsch. f. Sex.-wiss.*, 1928, **14**, 264-270.—The author describes sexual frigidity in women as a result of deficiency in the function of the hypophysis (pituitary). The hypophysis is indispensable to the normal growth and function of the genital organs. A description is given of a case of sexual frigidity in a woman in whom there were physical characteristics of pituitary defect, such as acromegaly, etc. Treatment of the case with Hypophysioton (Merck) and a preparation of the posterior lobe (*Praparate des Hinterlappens*) brought about an increase in the sexual libido only, however, during the course of the treatment.—*W. Berry* (Rochester).

3134. **Offergeld, H.** **Hormonale Beeinflussung der weiblichen Libido.** (Hormonal influence upon female libido.) *Zsch. f. Sex.-wiss.*, 1928, **14**, 301-305.—A continuation of the discussion of the nature of sexual frigidity in women (see II: 3133). The author regards frigidity as a disturbance which can best be treated by means of hormonal agencies, preëminently those of the hypophysis. On the other hand, what might be called sexual torridity (hyperlibido) seems to

be connected with the epiphysis (pineal gland). Since the investigations of Marburg most authorities regard the epiphysis as the antagonist of the hypophysis, and the chief member of the group of sex limiting glands.—*W. Berry* (Rochester).

3135. **Offergeld, H.** *Hormonale Beeinflussung der weiblichen Libido.* (Hormonal influence upon female libido.) *Zsch. f. Sex.-wiss.*, 1928, **14**, 323-332.—The author continues the discussion of the rôle of the pineal gland in sexual development (see II: 3133, 3134). Several cases are cited showing the relation between sexual torpidity in young girls and women and defects in the structure and functions of the gland. The author asserts that he has succeeded in controlling this over-produced sexual activity in several cases through the use of Epiglandol. Bibliography.—*W. Berry* (Rochester).

3136. **Ohyama, I.** *Beitrag zur Kenntnis der Physiologie und Pathologie des Alters beim Menschen.* (A contribution to the understanding of the physiology and pathology of the aged.) *Arch. f. Frauenkd. u. Konst.*, 1927, **13**, 35-88.—Anthropometric and vasomotor measurements of changes during the involution period based on analyses of data from 101 men and 100 women ranging in age from 60 to 88 years.—*D. B. Klein* (Texas).

3137. **Pearson, G. H. J.** *A note on a process in civilized children, tending to the fixation of the libido on the genital organs.* *Psychoanal. Rev.*, 1928, **15**, 239-241.—A case of training in control of urination and defecation and its results are described.—*W. Dennis* (Ohio State).

3138. **Puca, A.** *Morphinisme chronique.* (Chronic morphinism.) *Riv. sper. fren.*, 1928, **51**, No. 5-6.—After studying the production of agglutinins in morphinized rabbits, Puca arrived at the conclusion that the morphinized organism is below normal in its humoral defenses against diseased stimulation, that the formation of agglutinins is inferior to that observed in the normal organism, that during demorphinization the power of agglutination is restored, and that the salts of morphine prevent the development of bacteria.—*G. C. Ferrari* (Bologna).

3139. **Richet, Ch.** *Notre sixième sens.* (Our sixth sense.) Paris: Montaigne, 1928. Pp. 250. 122 fr.—This book is a monograph of facts designed to prove the existence of a sixth sense, which the author defines in this way: "a mysterious sensibility which reveals to us (in certain fleeting moments and in an imperfect way) a fragment of reality." There are four parts: (1) the sixth sense in general, (2) observations (18 in number) and experiences which establish the reality of the sixth sense, (3) ten monographs on experiments carried out with specially sensitive persons, and (4) considerations of the sixth sense, phenomena which may be related to it and hypotheses on its mechanism (telepathy, "vibration of reality," pragmatic cryptesthesia, the spirit hypothesis, hyperesthesia). An attempt at a classification of the "vibrations of reality" brings into play the sixth sense and the rôle of symbolism in its functioning. There is no bibliography.—*Math. H. Piéron* (Sorbonne).

3140. **Roback, A. A.** *The psychology of character, with an historical survey of temperament.* London: Kegan Paul; New York: Harcourt, Brace, 1927. Pp. xxiv + 595.—This volume is a comprehensive study of character, temperament and personality. It is divided into four parts consistent with the materials and the manner of treatment. The first part is a survey of the historical background, in which the author traces "characterology" through the various types of literature, and defines the technical terms of character study. The second part treats of the various classifications of character. The socio-economic treatment of character by Fourier, and the reviews of the British, French, German, Dutch, Russian, Hungarian, Italian and South American writers are dealt with. The third part, entitled "Movements and Methods," evaluates the contributions

of psychiatry, psychoanalysis, the *Gestalt* school, endocrinology, the mechanistic, the *Struktur* and the behavior schools of psychology. The worth of biographical and historical material as sources of character study is appraised, and the attempts in America to attack the subject through experimentation are outlined. The fourth part of the book sets forth the views of Roback. Here he discusses inhibition, thought and character, character and conflicts, environments and adjustments. He maintains that there is a general factor of character and specific sub-factors. He conceives of character as a psycho-physical disposition, controlled by a "regulative principle," to inhibit instinctive impulses. The regulatory principle varies, the highest types of character being capable of realization only by individuals of highest intelligence. Thus it follows that it is possible to chart character according to the sanctions which regulate the individual's conduct.—*A. S. Raubenheimer* (Southern California).

3141. **Robin, G.** *La psychanalyse française.* (French psychoanalysis.) *Bull. méd.*, 1928, **42**, 591-599.—The author sets forth Freud's theories. He shows that Freudism is a doctrine, and that psychoanalysis is a technique and a mode of treatment. Psychoanalysis may be of use and may effect a cure without always having Freud's ideas as the essential basis of the process. Psychoanalysis is primarily a new method in the hands of psychiatry, a new practice. It has the merit of freeing psychiatric conceptions from their intellectualistic principles, and of giving helpful expression to those who are mentally ill.—*Math. H. Piéron* (Sorbonne).

3142. **Scheuer, O. F.** *Bibliographie der Sexualwissenschaft.* (A bibliography on sexual science.) *Zsch. f. Sex.-wiss.*, 1928, **14**, 359-367.—A bibliography of 246 titles of literature bearing on problems of sex hygiene, sex abnormalities, etc.—*W. Berry* (Rochester).

3143. **Schmidt, P.** *Über biologische Altersbekämpfung.* (The biological attack on senility.) *Arch. f. Frauenkd. u. Konst.*, 1927, **13**, 89-122.—An historical and critical review of rejuvenation methods from the time of Brown-Séquard to the present. In the author's opinion experimental and clinical evidence renders the reality of the endocrinologist's success in coping with old age an assured phenomenon. His own work on Chinese prisoners undertaken in collaboration with MacKinstry was intended to dispose of the "auto-suggestion" and "improved hygiene" objections. The Steinach operation performed on senile inmates under conditions equivalent to work on laboratory animals resulted in such unequivocal improvement as to invalidate the latter objections. Numerous photographs are presented to indicate the decisive nature of the changes following vasoligation. The question of the duration of improvement is also discussed.—*D. B. Klein* (Texas).

3144. **Schottky, J.** *Die Veränderung der Alkoholwirkung bei gleichzeitiger Aufnahme von Fett- oder Eiweissnahrung.* (The change in the effect on alcohol caused by simultaneous consumption of fatty or albuminous food.) *Psychol. Arbeit.*, 1928, **9**, 384-434.—The author studied the change in working efficiency produced by 40 gm. absolute alcohol in approximately 25% solution when consumed alone or with simultaneous consumption of food consisting predominantly of fat or albumin. The activities studied were: addition of one-place numbers, Bourdon's test, precision work (needle-plate) and ergograph. There was a considerable detrimental effect on each of the four activities. The decrease in efficiency was greatest on the pure-alcohol days; it was considerably less when fat was consumed simultaneously, and still less when albumin was consumed. There were several characteristic differences also in the manner in which the effect wore off. The author seeks to explain these differences by a delay in the absorption of alcohol caused by the consumption of food, especially the albumin,

or by chemical combination of the albumin with the alcohol.—*O. Graf* (Munich).

3145. **Seeling, O.** *Suggestion und Hypnose in der heilpädagogischen Praxis mit besonderer Berücksichtigung der Heilung des Stotterns.* (Suggestion and hypnosis in therapeutic practice, with special consideration of the therapy of stuttering.) Berlin: Wiegandt und Grieben, 1927.—The book contains first a review of the insufficient way in which the chapter on suggestion and hypnosis has been treated until very recently even in large works on therapy. This is followed by a discussion of the nature of hypnosis and suggestion, based not only on the author's own investigations but also on those of noted psychotherapists. There follows another part about the history of the pedagogy of suggestion, with special reference to the school of Coué-Baudouin. Finally there is treated the therapy of stuttering through hypnosis and suggestion; here it is pointed out how brazenly it is still maintained that stuttering is a disability which can be cured permanently and under guarantee. The literature of the problem has been consulted to a large degree.—*O. Seeling* (Berlin).

3146. **Serrani, L.** *La psicoanalisi e la giustizia penale.* (Psychoanalysis and penal justice.) *Riv. di Sociol.*, 1, 89-96.—The psychology of Freud, which holds that human activity is prompted by the instincts of self-preservation and race perpetuation instead of by reason or will and that behavior is the result of a conflict between the primitive, ancestral impulses and those acquired under the influence of civilization, must have a decisive effect upon practical sociology and penal justice. Penal justice can no longer be based on free will, but must take into consideration the strength of the impulses, the ceaseless struggle within the individual, and the possibility of the abnormal mind's reverting to an archaic or infantile phase.—*R. E. Schwarz* (George Washington University).

3147. **Strasser, V.** *Suggestion.* (Suggestion.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1927, 110, 519-527.—In order to be open to suggestion one must "be incapable of accurate, independent, personally chosen comprehension of the multiplicity of facts." This is a form of subjectivism (in contrast with the objectivity of the directly recognized) and therefore is always to be found in the subjectively neurotic.—*W. Wirth* (Leipzig).

3148. **Vaughan, W. F.** *The lure of superiority. A study in the psychology of motives.* New York: Holt, 1928. Pp. viii + 307. \$3.00.—It is the purpose of this book to show how the process of compensation for inferiority provides the channel through which handicaps can be made to contribute to the development of power. It is not claimed that the inferiority-compensation theory is the only principle by which to analyze human motives, but that it is a very valuable one. The meaning of the inferiority complex is extended to include not only feelings of physical origin but also those due to intellectual, social and moral deficiencies. The typical victim of this complex is described as a sensitive, refractory, overconscientious, egotistic, aggressive introvert. The traits ascribed by Adler to the neurotic, namely, avarice, eagerness for knowledge, one-sidedness, eccentricity, and religiosity, are shown to be possible sources of the emotional force which drives the individual to super-normal achievement; that is, to overcompensation. In Part II the theory is applied to selected groups and individuals. Radicals—communists, bolshevists, revolutionists, reformers—are all actuated by the necessity for remedying their social or political inequalities. Extreme radicalism is an instance of overcompensation for serious social maladaptation. The unrest of the laboring classes is evidence of inferiority feeling, which craves not wages but social recognition. The feminist movement arises from the desire of women to escape from their inferior status. The persecution of the Jews is shown to have contributed to their advancement. "The splendid record of this unappreciated race is sufficient evidence in itself that their inferiority has found its glory in the healing balm of illustrious compensation."

Two individuals, Schopenhauer and Lincoln, are subjected to detailed analyses to show how their superior attainments may be attributed to this fundamental process of compensation for inferiority. There is a bibliography of references on compensation.—*M. P. Montgomery* (Faribault, Minn.).

3149. **Wiesner, B. P.** *Die Phasennatur des Sexualzyklus.* (The phasic nature of the sex cycle.) *Arch. f. Frauenkd. u. Konst.*, 1927, 13, 225-260.—A critical study of oestrous and reproductive phenomena based on a survey of recent experimental work, including the author's. The endocrine factors regulating periodicity are evaluated. The subject of sex rhythms in male animals is included, although the bulk of the article is concerned with female sex cycles. Available experimental results indicate the necessity of sharply differentiating for purposes of analysis the rhythmic changes characterizing the sex cycle from those of the reproductive cycle. In this connection attention is called to a common analogical fallacy of identifying vaginal hemorrhages of many animals during the rutting phase with menstrual mechanisms. Morphological and physiological studies justify the division of the female sex cycles into two groups, depending on the species studied: (1) a group showing diphasic cycles in which each cycle runs its course for the most part in a separate organ system; and (2) a group in which the entire cycle runs its course within a single organ system. This system of the sex cycles is outlined by the author according to the following scheme: (A) Diphasic cycles: The cycle shows two phases: sex activity limited to definite stages alternates with sex antagonistic stages, which characterize the resting stage, the entire reproductive phase, but also the major portion of the first phase (proliferation, etc.). These types are called rutting types (*Brunsttypen*). (1) Bicyclical course: Each phase represents a self-enclosed cycle, which means that it originates in its terminal condition. As a consequence the first phase can run its course separately and the second only appear following peripheral stimuli (coitus). The periodicity of the first phase proceeds in quite autonomous fashion. Examples: rat, mouse, and probably guinea-pig. (2) Monocyclical course: The two phases are not separated by a resting condition. They are not locked within themselves. The starting point is only attained at the end of the complete series of changes, so that only a single cycle is manifest. The second phase always follows the first. An autonomous periodicity characterizes the entire cycle, the phases merging into each other. Examples: bitch, cow, sheep, sow. (B) Monophasic cycles: Sexual activity is not limited to definite stages and the somatic signs of a separate sex phase are consequently lacking. The cycle runs its course in a single phase without being interrupted by the beginning of reproductive changes. (1) Types of autonomous periodicity. The cycle runs its course in regular periodicity determined by inner factors. Examples: man, *Macacus rhesus* and the other apes. (2) Types of conditioned periodicity. The cycle is initiated solely by a peripheral stimulus. Only known case: rabbit. An exposition of the validity and implications of the foregoing scheme forms the chief purpose of the article.—*D. B. Klein* (Texas).

[See also abstracts 2994, 2996, 3005, 3038, 3086, 3158, 3174, 3178, 3203, 3289, 3328, 3331.]

#### NERVOUS AND MENTAL DISORDERS

3150. **Altschul, R.** *Die Einwirkung der Kohlenoxydvergiftung auf das Zentralnervensystem.* (The influence of carbonic oxide poisoning on the central nervous system.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1927, 111, 442-464.—The author asserts that in 4 brains the most certain changes not due to processes

of decomposition were vascular. This is an infiltration of white blood elements in three stages. In the first stage they are still found in the lumen of the vessels of the brain, in a position and quantity relative to the red blood corpuscles, which can not be explained on the basis of a simple blood stoppage, but points to a migration of the white blood corpuscles from the rest of the body. In the second stage the infiltration is already partly confined to the vessel walls, and in the third stage is present there alone. The infiltration consists for the most part of large and small lymphoid cells, a few polymorphic nuclear leucocytes and isolated macrophages. There is a relationship with the inflammation process. The condition can be differentiated with certainty from lues and encephalitis.—W. Wirth (Leipzig).

3151. Altschul, R., & de Angelis, E. Über eigenartige Begleitsymptome eines Hirnechinococcus. (Individual symptoms accompanying a brain echinococcus.) *Monatsschr. f. Psychiat. u. Neur.*, 1927, **66**, 325-341.—The 20-year-old Albanian farmer who died of an epileptic attack shortly before a contemplated tumor operation had a cavity the size of a small orange in the left occipital lobe. In the development of the wall of the cyst the whole occipital convolution was involved on the mesial as well as the convex side. In spite of this the most careful clinical examination showed no alexia, which would be expected according to Henschen and Niessl von Mayendorf. Either there is no real center for reading (Wernicke) or one must assume (with Mingazzini) that the right angular gyrus can take over the function of the left completely, not for senseless reading solely.—W. Wirth (Leipzig).

3152. [Anon.] Emotional polycythemia. *J. Amer. Med. Asso.*, 1928, **90**, 1875.—The sharp rise in the erythrocyte count of the blood which normally accompanies emotional excitement fails to appear when the spleen is denervated, thus pointing to that organ as the immediate cause of polycythemia.—G. J. Rich (Bellevue Hospital).

3153. [Anon.] Outline of research in progress 1927-1928, Department of Research, Training School, Vineland, N. J. *Tr. School Bull.*, 1928, **25**, No. 4.—The following researches are being conducted at the Training School: (1) A Differential Standardization of the Ferguson Form Boards, (2) Adaptive Behavior of Idiots, (3) Types of Mental Retardation, (4) A Survey of Mongolian Traits, (5) Measurement of Progress in Training, (6) Disabilities following Birth Injury, (7) Personal Behavior Score Card as a Means of Objective Estimation of Social Behavior, (8) The Reliability of the Goodenough Test, (9) The Relation of Physiognomy to the Diagnosis of Feeble Mindedness and Normality, (10) Relation of Dental Development to Feeble Mindedness, (11) Emotional Instability, (12) Specific Reading Ability, (13) Congenital Auditory Aphasia Complicated by Amentia, (14) Congenital Auditory Aphasia, (15) Precocious Puberty in a Boy of Six.—E. M. Achilles (Columbia).

3154. Appel, K. E., Farr, C. B., & Marshall, H. K. Insulin therapy in undernourished psychotic patients: preliminary report. *J. Amer. Med. Asso.*, 1928, **90**, 1788-1789.—Insulin treatment is a valuable adjunct in the treatment of certain cases of undernutrition in psychotic patients. In approximately 20% of the cases definite improvement in mental status was noted.—G. J. Rich (Bellevue Hospital).

3155. Barborka, C. J. Ketogenic diet treatment of epilepsy in adults. *J. Amer. Med. Asso.*, 1928, **91**, 73-78.—Thirty-two adult patients suffering from epilepsy were treated with a ketogenic diet. The attacks were fully controlled in 7 cases and partially controlled in 12 others. The technique of the diet is considered.—G. J. Rich (Bellevue Hospital).

3156. Bénon, R. L'asthénie. (Asthenia.) *Bull. méd.*, 1928, **42**, 40-42.—Asthenia, a very common muscular and nervous syndrome, often has no organic

cause, and offers very varied and bewildering forms. The forms of asthenia can be grouped as follows: chronic, organic, functional, and independent. All four forms are acquired with or without evident predisposition both in constitutional and congenital asthenia.—*Math. H. Piéron* (Sorbonne).

3157. **Benvenuti, M.** *Tumeur dans un cervelet congenitalement abnorme.* (Tumor in a congenitally abnormal cerebellum.) *Riv. sper. fren.*, 1928, 51, No. 5-6.—The presence of the general symptoms of cerebral tumor, the absence of all localizing signs, and the presence of particular mental disturbances led the author to an erroneous localization. Autopsy revealed the presence of a large tumor (telangiectatic gliosarcoma) of the cerebellum located in the posterior cranial fossa. The absence of cerebellar symptoms was due to a congenital malformation of the cerebellum.—*G. C. Ferrari* (Bologna).

3158. **Bostock, J.** *The scholastic and character classification of mental defectives.* *Med. J. Australia*, 1927, 14, 252-256.—Methods used in assessing intelligence and character, with description of intelligence standards and character traits of 64 mentally defective children.—(From *Eug. News.*)

3159. **Bouyer, H.** *La psychiatrie constitutionnelle aux Etats-Unis.* (Constitutional psychiatry in the United States.) *Hygiène ment.*, 1928, 23, 82-87.—The author presents a review of the writings of F. G. Wertheimer and Florence E. Hesketh and an explanation of their classification of subjects into four types: pyknic, athletic, asthenic, and a type intermediate between the pyknic and the athletic, the pyknoid.—*Math. H. Piéron* (Sorbonne).

3160. **Buscaino, V.** *Ipertonie due à la décérébration et reflexes toniques du cou pendant le coma apoplectique. Lésion mesencephalique diagnostiquée pendant la vie.* (Decerebrate rigidity and tonic reflexes of the neck during apoplectic coma. Mesencephalic lesion diagnosed during life.) *Riv. di pat. nerv. e ment.*, 1928, 33, No. 1.—Cerebral hemocragia had destroyed the corpus striatum, the internal capsule and a part of the thalamus on the right side; death followed four hours after the stroke. During the coma Buscaino observed a hypertonia of the extensors which was more noticeable on the right side. This hypertonia on the right side disappeared if the head of the patient was turned to the left. Buscaino identifies these clinical phenomena with those which Sherrington observed in animals after the removal of the brain (rigidity) and also with those reported by Magnus and Kleijn (variation of the rigidity with movements of the neck).—*G. Corberi* (Milan).

3161. **Carpenter, E. R.** *Early tumors of the brain.* *Med. J. & Rec.*, 1928, 128, 83-85.—The predominating early symptoms of brain tumor are headaches, vomiting, and convulsions without known cause. Ventriculography is stressed as a final means of diagnosis and localization, and its value in the early stages is recommended.—*R. C. Givler* (Tufts).

3162. **Chevens, L. C. F.** *A hypothesis of the mechanism of the functional psychoses.* *J. Ment. Sci.*, 1927, 73, 402-413.—"An attempt has been made to show that the mechanism in all the so-called 'functional psychoses' is similar, i.e., the real situation is intolerable owing to the non-satisfaction of the patient's urges and desires, so that satisfaction is acquired in a world of phantasy. This is true for paranoia, schizophrenia, and the manic-depressive psychosis. Whereas those with normal personalities attack the actual environment and attempt to fit themselves to it or it to them, those who develop a functional psychosis have abnormal personalities, so that they shirk reality when it is unpleasant and retire into a pleasant thought world. The paranoid achieves this through delusions of persecution whereby he overlooks his own imperfections and failure to gain satisfaction. The schizophrenic passively retires from his environment and satisfies all his desires in a world of phantasy. The manic-depressive in a manic attack escapes

from all inhibitions into a feeling of exaltation that all his desires have been realized.'—*E. F. Symmes* (Institute for Child Guidance).

3163. **Davis, F. A.** **Occupational therapy in the treatment of those mentally disabled.** *Occup. Therap. & Rehab.*, 1928, 7, 159-165.—The object sought is to arouse interest and confidence and reestablish the greatest possible capacity for social and industrial adjustment. Each case should be individualized with reference to habits and temperament. Group activity is preferable in many cases because of the arousal of interest by imitation. In beginning crafts projects there should not be too much stress on workmanship for fear of discouragement. The type of material may have an important bearing on interest; colored reed instead of plain material for basketry may make the difference between a worker and a non-worker. Music is a good form of therapy for those musically inclined. Many kinds of therapy projects are mentioned briefly.—*H. E. Burtt* (Ohio State).

3164. **Delbrück, H.** **Archicapillaren und Schwachsinn.** (Archicapillaries and feeble-mindedness.) *Arch. f. Psychiat.*, 1927, 81, 606-628.—The author criticizes the assumption of Walter Jaensch that anomalies of development in the capillaries of the skin are closely related to feeble-mindedness. The actually established facts of Höpfner and Jaensch concerning the capillaries of the skin and the degenerative phenomena appearing with them are acknowledged with unessential variations as well as the fact that the statistics of the Hanover special school show a relatively high percentage of so called archicapillaries among the feeble-minded in the sense of Jaensch's theory. However, the author found that other schools showed no such uniform relationship between capillary development and intelligence, indeed, the promoted class in the Hanover elementary schools with the most gifted pupils contained the highest percentage of "productive scanty forms" (8.3%). Moreover, the other dysplastic stigmata of degeneracy gave no unequivocal relationship with the archicapillaries, and of 5 children who were obese because of endocrine involvement, 3 had normal neocapillaries and 2 had archiform. The "productive scanty forms" were found predominantly in children from 11 to 12 years of age, and by 15 or 16 years of age the neocapillaries predominate. Nevertheless, it is considered possible that a degenerative constitution can be distinguished in the capillaries of the skin, although the problem first put by Jaensch has not been solved.—*W. Wirth* (Leipzig).

3165. **Fleury, M.** **A propos des constitutions psychopathiques. La cyclothymie dédoublée.** (Concerning certain psychopathic formations. Doubled cyclothymia.) *Bull. méd.*, 1928, 42, 501-503.—Cyclothymia is characterized by alternate periods of excitement and depression. The periods of excitement, when they are very much accentuated, constitute mania, while the depression states cause a melancholia. The author presents observations on a case where these two phases of cyclothymia, in place of being present in one subject, appear in the course of two generations, one generation having the hyperactive phase and the other the depressive.—*Math. H. Piéron* (Sorbonne).

3166. **Fleury, M.** **A propos des constitutions psychopathiques. La cyclothymie dédoublée.** (On psychopathic constitutions. Doubled cyclothymia.) *Encéph.*, 1928, 23, 245-247. *C. r. Soc. de Psychiat. de Paris*, 1928, Feb. 16.—The author presents six observations showing what he calls the doubling of cyclothymia, one generation taking for itself the depressive phase, the other taking the hyperactive phase, instead of presenting alternations of these phases in the same subject.—*Math. H. Piéron* (Sorbonne).

3167. **Galant, J. S.** **Ein neues Konstitutionstypsensystem (=KTS.) der Frau.** (A new system of constitutional types for women.) *Schweiz. med. Woch.*, 1927, 57, 951-953.—The relative high percentage of non-classifiable forms, besides the indefinite mixed forms of Kretschmer's system of constitutional types, has made necessary the presentation of a new system of constitutional types which

embraces as nearly as possible all types and which the author characterizes in this way: (1) the stenosomic constitutional group, (a) the asthenic type, or the very small woman, (b) the stenoplastic type, or the robust asthenic; (2) the mesosomic constitutional group, (a) the pyknic type, or the ideal of womankind, (b) the mesoplastic type, or the work-type of woman; (3) the megalosomic group, (a) the athletic type, or the masculine type of woman, (b) the subathletic type, or the slenderly built, athletic type, and (c) the euryplastic type, or the very large woman. The dysplastic constitutional group of Kretschmer's classification belongs to the group of constitutional anomalies and has nothing to do with the normal types. Finally there are transitional forms (pertaining largely to adolescents) which are designated as scales of constitutional types (*Konstitutionstypenleiter* [KTL.])—*M. R. Lambercier* (Geneva).

3168. **Gorsuch, S. C.** **Research in progress: the adaptive behavior of low-grade feeble-minded.** *Tr. School Bull.*, 1928, **25**, 27-29.—Individual tests of development status or general intelligence were given. Children in a state of permanent infancy differ from normal babies in certain respects, such as range of movement, strength, coordination, sensitivity. A general retardation of physical development is also evident. The children are observed in a situation by means of Gesell's one-way vision screen; detailed observations of the steps of a solution, time required and degree of success are recorded. In the idiot we have a level of behavior which bridges the gap between the highest animals and lowest human species. The investigator desires to bring the comparative method into the clinical field.—*E. M. Achilles* (Columbia).

3169. **Graves, T. C.** **Chronic sepsis and mental disorder.** *J. Ment. Sci.*, 1927, **73**, 563-566.—The account of a case of mental disorder in which definite heredity could be traced together with a catatonic confused state suggesting a bad prognosis, which, however, cleared up after treatment of septic foci. The term "septic heredity" is suggested to connote the effect of the maternal toxæmia upon the child *in utero*, and possibly a more hopeful prospect may be looked for. In this case chronic sepsis was present in the mother and in the younger members of the family, as well as the patient.—*E. F. Symmes* (Institute for Child Guidance).

3170. **Gross, K., & Sträussler, E.** **Zur Frage der forensischen Bedeutung der Wagner-Jaureggschen Paralysebehandlung.** (The forensic significance of the Wagner-Jauregg treatment of paralysis.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1927, **111**, 485-494.—The authors are opposed to the contention of K. Schneider that in spite of remission all paralytics are to be looked upon as paralytics from the forensic point of view and come under the provision of § 51. There are at the disposition of the Vienna psychiatric clinic cases which had complete remission for 10 years and were in their occupations completely adequate socially, sometimes in responsible positions. A gradation, however, must be taken into consideration, since much less mental ability is required for criminal responsibility than for the successful practice of responsible professions (doctor, druggist).—*W. Wirth* (Leipzig).

3171. **Guillaume, A. C.** **Le sympathique et les systèmes associés: vagotonie, sympathicotonie, neurotonies.** (The sympathetic and related systems: vagotonia, sympathetic tonia, neurotonias.) Paris: Masson, 1928. Pp. 362. 40 fr.—An etiological, clinical and therapeutic study of the states of disequilibrium in the nervous system of the organo-vegetative processes. An important chapter presents a view of the place of the psychic in states of organo-vegetative disequilibrium.—*Math. H. Piéron* (Sorbonne).

3172. **Hunter, W.** **Chronic sepsis as a cause of mental disorder.** *J. Ment. Sci.*, 1927, **73**, 549-563.—"Discovery of the part played by sepsis in mental disorders introduces an entirely new era into the whole subject of the nature of

these disorders, and the possibility of controlling and preventing them. The removal of the sepsis in all cases of mental disorder and insanity is therefore called for as a matter of urgency and as a first measure of treatment in every case. Each mental hospital should be as fully and as well equipped for surgical work as it has hitherto been for medical or nursing care. The possible standard of increased relief which the sufferer from 'septic psychosis' may receive is that their chance of recovery may be doubled, that the duration of the stay in hospitals may be materially reduced, and that on discharge the chances of remaining well, both physically and mentally, will be greatly improved by the removal of the sepsis if that removal is carried out at the first onset of the trouble before permanent damage is done."—E. F. Symmes (Institute for Child Guidance).

3173. Jelliffe, S. E. **On eidetic imagery and psychiatric problems.** *Med. J. & Rec.*, 1928, **128**, 80-83.—With generous references to Klüver and Jaensch, emphasis is placed upon the possible fruitfulness of regarding the *Eidetiker* as a basis of cross-classification in connection with current psychoanalytic and neurological categories.—R. C. Givler (Tufts).

3174. Johnson, L. B. T. **The psychiatrist looks at medicine.** *Psychoanal. Rev.*, 1928, **15**, 247-260.—An address before the Clinico-Pathological Society of Washington, D. C. The author points out that psychiatry is the study of total behavior, that much disorder is functional, that disorder in one organ may affect others, that functional disorder may become structuralized, etc. Several case studies are presented briefly.—R. R. Willoughby (Clark).

3175. Kahle, H. K. **Capillarformen bei Schwachsinnungen und ihre Beziehungen zur geistigen Entwicklung.** (Capillary forms in the feeble-minded and their relation to mental development.) *Arch. f. Psychiat.*, 1927, **81**, 629-640.—Although the study of the capillaries, according to Ottfried Müller's expression, is no "diagnostic panacea," it must be used industriously along with other means, especially since it is important in diagnosis. The author finds three forms. The first, that of archicapillaries, includes only 17% of the 253 idiots and young imbeciles studied in a region free from goiter, and then only as a "symptom of difficult inhibition." The largest group (53.4%) are of the terminal capillary form which depends upon the fact that in the great bulk of the mentally retarded a final form is reached unusually early, with the end of improvability, in which a monotonous, coarse form of increased simplicity predominates. 29.6% showed capillaries approximately normal. By far the greater number of these three groups can attend the kindergartens or the schools for the feeble-minded.—W. Wirth (Leipzig).)

3176. Kant, O. **Beiträge zur Paranoiaforschung. II. Paranoische Haltung in der Gesundheitsbreite (vergleichende Analyse und forensischer Ausblick).** (Contributions to the study of paranoia. II. Paranoic attitude within the range of normality. Comparative analysis and forensic view.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1927, **110**, 558-579.—Continuation of vol. 108, p. 625. The author finds a relationship of mental structure between the Butala, found by Gaupp to be normal, who murdered one another because of witch superstition, and a patient recognized to be paranoic who planned a murder. It is therefore impossible to erect punishment on guilt, and security is the only practicable aim.—W. Wirth (Leipzig).

3177. Kant, O. **Zum Verständnis des schizophrenen Beeinflussungs-gefühles.** (Toward the understanding of the schizophrenic feeling of being influenced.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1927, **111**, 417-441.—The author presupposes Bleuler's theory of the ambivalence of the "implicit" sensory illusions, but attempts, through a perception of the structure of the entire personality, to make the pathological phenomena more understandable. No mechanistic associationist or purely intellectual explanation is sufficient for the dis-

turbances of thought, but the latter determines the affective life. However weak the patient feels, he would be strong; if he tries his strength, he sinks immediately under his weakness. This tension between plus and minus lies by no means primarily in the sexual field, but is expressed in every field: affirmation and denial simultaneously. The "exertion of influence" always proceeds from that which has not been overcome.—W. Wirth (Leipzig).

3178. Klein, R. *Über Halluzinationen der Körpervergrößerung.* (Hallucinations of body enlargement.) *Monatsschr. f. Psychiat. u. Neur.*, 1928, 57, 78-85.—The author reports briefly 3 cases which had in common the feeling of body alteration. The patients experienced, in the manner of an attack, the feeling that the entire body increased in size and strength. One patient, during this condition, saw an oven enlarging, and another observed an enlarging of his bed. In normal experience we do not possess a similar complex body sensation. There is further psychological discussion of the place of these hallucinations in relation to other hallucinations having to do with the body, and of their relation to Anton's symptom of the erroneous perception of the defect as well as to Head's body scheme. The changed perception of things in external space in the nature of enlargement, associated with the presence of body feeling, is in a certain sense parallel to the experience of mescal intoxication and to individual cases of depersonalization, as well as to perceptions of peculiar changes of the external world in acute psychoses.—H. E. Freiberg (Breslau).

3179. Krapf, E. *Paranoischer Liebes- und Verfolgungswahn mit symptomatischer Exacerbation. Ein Beitrag zur Paranoiafrage.* (Paranoic delusions of love and persecution with symptomatic exacerbation. A contribution to the problem of paranoia.) *Arch. f. Psychiat.*, 1927, 81, 561-578.—After a long medical history the case (Countess B.) was classed as paranoic. Psychological knowledge does not contribute to explaining why in this individual case there was development of delusions without other reactions (e.g. hysterical phenomena). The climacterium and Basedowoid (light) symptoms point to complications.—W. Wirth (Leipzig).

3180. Kretschmer, E. *Über Hysterie.* (Hysteria.) (2d ed.) Leipzig: Thieme, 1927. Pp. v + 128.—To the second edition of this book has been added a short chapter on constitution and character in the hysterical, which in the author's words represents as a matter of fact only a preliminary sketch. Social hysterias, which predominantly represent a selection of biological minus variants of diminished capacity for life, are, for the most part, stigmatized vegetatively. A uniform type of body structure cannot be demonstrated. In what is strictly hysteria are found the same symptoms or increased disturbances in the sexual constitution. In common with most psychiatrists, Kretschmer rejects the concept of the "hysterical character" as it is understood in everyday speech.—S. Fischer (Breslau).

3181. Kuttner, H. *Über die akute Entstehung eines Kleinhirnsyndroms in Anschluss an einen Status epilepticus.* (The acute development of a cerebellar syndrome in connection with status epilepticus.) *Monatsschr. f. Psychiat. u. Neur.*, 66, 255-260.—W. Wirth (Leipzig).

3182. Liebers, M. *Zur Histopathologie der amaurotische Idiotie und Myoklonus-Epilepsie.* (The histopathology of amaurotic idiocy and myoclonic epilepsy.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1927, 111, 464-484.—Throughout the cerebrum there was status spongiosus delaminatus, and the cerebellum was atrophied in the radiating and non-radiating fibers. In the atrophic nucleus dentatus of the cerebellum and in parts of the ganglia of the caudex cerebri myoclonic corpuscles were found of lecithinoid-lipoid character, which were derived from the juvenile amaurotic degeneration process.—W. Wirth (Leipzig).

3183. **Magliulo, A.** *Altération des vaisseaux du sang de la moelle d'individus agés et artériosclérotiques.* (Changes in the blood vessels of the cord in aged and arteriosclerotic individuals.) *Riv. di pat. nerv. e ment.*, 1928, **33**, No. 1.—The author gives an analysis of ten cases, eight of which were aged individuals, and two young for control. Among the arteriosclerotic there was observed a hyaline degeneration of the inner membrane, more rarely a thickening of the median membrane. The region of greatest frequency was the lumbar; the substance most affected was the white.—*G. Corberi* (Milan).

3184. **Malott, B. E.** *Therapeutic occupations for mental cases.* *Occup. Therap. & Rehab.*, 1928, **7**, 166-172.—Excited patients need sedative occupations, the depressed must be stimulated, the demented must be given activity to divert them from their delusions. The prescription must also depend on whether the patient is on parole or semi-parole, or restrained. Agriculture is generally a desirable type of therapy. Poultry raising seems good for psychoneurotics. Care of animals seem beneficial for "mental shut-ins." It is advisable to keep mental cases busy as much as possible. A few case studies are given showing how excitement, depression or dementia were partially counteracted by occupational therapy.—*H. E. Burt* (Ohio State).

3185. **Marcinowski, J.** *Das Kernproblem der Psychotherapie.* (The central problem of psychotherapy.) *Psychiat.-Neur. Woch.*, 1928, **30**, 149-156.—Marcinowski sees the most essential problem of psychotherapy in character formation, in the comprehension of the tasks of life, in the development of a man bound by the sensual impulses of an animal into a wilful man with a mentality which overcomes impulses. The active ego-emphasized will is lacking in the neurotic, his mind shows a chaotic weakness of will. The individual neurosis is not the object of treatment, but the entire mind and personality and its threatened fitness for life. This is the chief point of attack for the psychotherapeutic approach, and this approach is in conspicuous measure an educational one. It is always a case of emphasizing and awakening self-education and self-discipline. The doctor plays in it only the rôle of leader and unsparing director of consciousness.—*P. Plaut* (Berlin).

3186. **Marshall, R. M.** *The mental aspects of epidemic encephalitis.* *J. Ment. Sci.*, 1927, **73**, 589-595.—"The difficulties of a differential diagnosis between epidemic encephalitis and the other forms of non-purulent encephalitis may be insurmountable. However, the fact that the condition has occurred in the progress of a malady that has run a fickle course, in which divers symptoms of nervous disease have put in an evanescent appearance, goes a long way to establish the nature of the disease process at work. It is far from being the rule for an interval to elapse between the subsidence of the disease and the appearance of its sequelae. Not infrequently a syndrome that has played a more or less prominent part in the acute phase of the disease persists after this phase has apparently subsided. Age appears to play an important part in the incidence of the residua and sequelae of epidemic encephalitis. Psychomotor excitement, with or without nocturnal wakefulness and somnolence by day, ties, choreiform movements, and disorders of the respiratory rhythm, show a preference for the early years of life. On the other hand, the Parkinsonian syndrome, mania, melancholia and confusion, and the residual paralyses are the appanages of youth and adult life. "Sex appears to have no influence on the influence of sequelae and the nature of the sequelae seems to vary from epidemic to epidemic. The great desideratum is rest to the mind and body. The mental state of the restless naughty child is akin to that of the maniac rather than that of the delinquent, hebephrenic, or the moral imbecile. The instability seems to be confined to no particular faculty of their minds. All their mental processes are unduly mutable. The restlessness is far from aimless; it is really a press

of occupation. General intelligence is not affected apparently to any appreciable extent. Nothing of the nature of a secondary dementia is ever seen even when the disorder has lasted as long as nine years."—*E. F. Symmes* (Institute for Child Guidance).

3187. **Moser, K.** *Grundsätzliches und kritisches zur Endo- und Exogenese der Schizophrenien.* (Fundamental and critical discussion of the endogenes and exogenesis of schizophrenies.) *Arch. f. Psychiat.*, 1927, **81**, 621-628.—The author points out the difficulties in the practical application of etiological grouping. Above all the disease picture is not yet so accurately circumscribed as in the case of epilepsies with their convulsions, in the classification of which the etiological point of view is better retained.—*W. Wirth* (Leipzig).

3188. **Neal, J. B.** *The present status of the etiology of epidemic encephalitis.* *J. Amer. Med. Asso.*, 1928, **91**, 231-234.—The supposed relationship between influenza and epidemic encephalitis does not rest upon a scientific basis. There is not as yet sufficient evidence to support the theories that the disease is due to toxins, to bacteria, or to a filterable virus. One is forced to the conclusion that up to the present time the etiologic agent of epidemic encephalitis has not been proved.—*G. J. Rich* (Bellevue Hospital).

3189. **Neidinger, M., & Blank, L.** *Verteilung motorischer Störungen bei extrapyramidalen Erkrankungen.* (Distribution of motor disturbances in extrapyramidal diseases.) *Arch. f. Psychiat.*, 1927, **81**, 659-695.—With the assumption that synergies are prefigured in the extrapyramidal system, which in normal cases are repressed through the function of higher levels, the authors advocate the possibility that the total motility and inhibition is dependent upon the active or passive attitude of reflex paths in which the tonus is regulated in a complicated manner.—*W. Wirth* (Leipzig).

3190. **Neidinger, M., & Kolik, M.** *Kalium- und Calciumgehalt des Blutes und der cerebrospinalen Flüssigkeit der Nervenkranken.* (Potassium and calcium content of the blood and the cerebro-spinal fluid in neuropathic patients.) *Monatsschr. f. Psychiat. u. Neur.*, 1927, **66**, 197-214.—*W. Wirth* (Leipzig).

3191. **Neustadt, R.** *Über Pfropfschizophrenie.* (Stopper schizophrenia.) *Arch. f. Psychiat.*, 1927, **82**, 78-84.—The author takes the point of view that congenital feeble-mindedness in a certain sense protects from a psychosis leading to further deterioration (Luther) in opposition to Medow's assertion that congenital defects in intelligence prepare the way for hebephrenia in many cases. Thus only a very small fraction of so-called stopper schizophrenias can really be classed as such.—*W. Wirth* (Leipzig).

3192. **Oppler, W.** *Die Zunahme der Suicidversuche und ihre Gründe.* (The increase in attempted suicide and its basis.) *Arch. f. Psychiat.*, 1927, **82**, 95-109.—The statistics for Breslau show an increase in successful suicide since the war only in the case of women. The attempts, on the other hand, have increased considerably for both sexes, especially because of psychopathic causes. Economic anxiety is the most important cause both for men and women, but in the case of women crime motivated by this cause must also be taken into consideration.—*W. Wirth* (Leipzig).

3193. **Pellacani, G.** *Epilepsie et anaphilaxie.* (Epilepsy and anaphylaxis.) *Riv. sper. fren.*, 1928, **51**, No. 5-6.—From a careful analysis of the concepts of anaphylaxis, antianaphylaxis, the characteristics of the epileptic fit and of the anaphylactic convolution, the pathogenesis, the pathological anatomy and the therapy of anaphylaxis and of epilepsy, Pellacani concludes that one cannot maintain the hypothesis of the existence of a specific anaphylactic mechanism in epilepsy, and suggests as more probable the cerebropathic concept of common epilepsy.—*G. C. Ferrari* (Bologna).

3194. **Pfersdorff, C.** *Sur quelques troubles de la motricité.* (Certain

motor disorders.) *Strassbourg Méd.*, 1928, **88**, No. 5, 65-70.—The author shows in a discussion of the cases of two patients suffering from organic affections of the brain that the present classification of praxis disorders into ideatory apraxia, ideomotor apraxia, and melokinetic apraxia is not sufficient to include the entire symptomatology of praxie disorders.—*Math. H. Piéron* (Sorbonne).

3195. **Pighini, G.** *Contribution anatomique à l'étude du cretinisme.* (An anatomical contribution to the study of cretinism.) *Riv. sper. fren.*, 1928, **51**, No. 5-6.—Pighini studied two members of a family from the goiter region, both showing goiter-cretinous degeneration. He carried out some investigations on the relationships of the two patients and some very careful anatomicopathologic studies on one of them. He shows the importance of the changes of the thyroid in the two cases and maintains that the thyroid gland exercises a directive function over the developmental differentiation of the individual as a whole.—*G. C. Ferrari* (Bologna).

3196. **Popenoe, P.** *Eugenic sterilization in California. XII. Social and economic status of the sterilized feeble-minded.* *J. Appl. Psychol.*, 1928, **12**, 304-316.—A report on the examination of the social and economic status of the parents of about 500 feeble-minded children at Sonoma State Home for the Feeble-minded (California). The occupations of the fathers were grouped according to Taussig's grouping, together with occupations of the fathers of 560 of the brightest children in the California public schools, of 300 of the world's greatest geniuses, of 683 mentally defective children in special schools in Munich, and of the whole population of California (1920). The parents in the two groups of defectives are markedly different from the parents of the brightest California school children, and still more different from the parents of the world's greatest geniuses. The father's occupation was given a numerical value (Barr's rating scale) and the percentage distribution shown. The fathers of the defective children do not deviate sharply from the population as a whole; the skilled trades furnish the largest number of defectives and the highest group (chiefly professional) furnishes much less than its quota. Correlations were obtained between IQ of the defective and the Barr rating of the father ( $r = 0.02$ ); mother's occupation and Barr rating of father (correlation ratio  $= 0.46 \pm 0.04$ ); father's Barr rating and religion (mean of Protestants,  $7.54 \pm 0.13$ ; of Catholics,  $5.78 \pm 0.12$ ); patient's IQ and occupation of mother (correlation ratio  $= 0.14 \pm 0.03$ ). The author points out that the study supports the principle that "sterilization must be applied to individuals because of their individual characteristics and inheritance, rather than because of their inclusion in some particular socio-economic group."—*M. Goodrie* (Clark).

3197. **Potts, C. S., & Drake, R. L.** *Diagnosis of multiple sclerosis.* *Med. J. & Rec.*, 1928, **128**, 73-77.—It is in the rather frequent atypical cases—those not clearly manifesting the Charcot triad—that mistakes in diagnosis are likely to occur. Absence of abdominal reflex, pupillary anomalies, and paresthesia referred to the feet and hands are early symptoms to be looked for.—*R. C. Givler* (Tufts).

3198. **Repond, A.** *La suggestion collective et l'établissement d'aliénés.* (Social suggestion and institutions for the insane.) *Schweiz. med. Woch.*, 1927, **57**, 322-325.—One of the fundamental aims of modern psychiatry should be the transforming of the psychological environment of institutions for the insane to the end of avoiding the phenomena of social suggestion, which expresses itself by an outward or by a symbolic opposition of the patient, particularly by a group of symptoms wrongly attributed to the psychosis itself. The author examines the various causes of social suggestion and reviews the appropriate means of changing the atmosphere of the asylum and of working against the weighty

prejudices concerning it, to the end that the patient may find an environment where confidence, good will, and hope rule.—*M. R. Lambercier* (Geneva).

3199. **Riese, W.** *Untersuchungen an einem Tastblindten. II. Mitteilung. Der makroskopische Hirnbefund.* (Studies in a case of astereognosis, 2d communication. Macroscopic brain findings.) *Arch. f. Psychiat.*, 1927, 82, 110-120.—The tactful disturbances in the patient, who died intercurrently, were described in *Monatsschr. f. Psychiatr. u. Neur.*, 1926, 62. The location of the tactful disturbance on the left side agrees with the enlarging cortical lesion in the right hemisphere of the brain. Moreover, the author seeks to make the importance of a serious lesion in the corpus callosum responsible for the disturbance of the conduction of the total tactful experience localized on the left side, especially for the disturbed experience on the part of the patient of his own bodily condition and his failing recognition of bodily defect.—*W. Wirth* (Leipzig).

3200. **Rocaz, Ch.** *L'acodynìe infantile.* (Infantile acodynìa.) *J. méd. de Bordeaux et du Sud-Ouest*, 1928, 105, 47-61.—The article deals with the case of a five-year-old child afflicted with infantile acodynìa. This disease is characterized by changes in the nervous state and disorders of subjective sensitivity at the levels of the hands and feet. The nervous disorders come first and often dominate the entire situation: loss of gaiety, irritability, and an apparent daily regression of intelligence. Affection is changed. The child may be no longer affectionate and becomes ill-natured even towards its mother. The sick child also exhibits during the same day alternate periods of depression and excitement. The pathological sensations felt at the level of the extremities are of four kinds: sensations of tingling, of heat, of burning, and of intense desire to scratch.—*Math. H. Piéron* (Sorbonne).

3201. **Salmon, A.** *Les modifications qualitatives et quantitatives du liquide céphalo-rachidien chez les épileptiques.* (Qualitative and quantitative modifications in the cerebrospinal fluid in epileptics.) *Riv. sper. fren.*, 1928, 51, No. 5-6.—The author believes that these changes are rather important in the pathogenesis of the epileptic attack. The hypertension of the liquid is due in part to the venous stagnation brought about by the convulsion, but also in part to the hypersecretion of the choroid plexus. This is characterized by an increase of albumin, chlorides, and cholesterol, and by the appearance of toxic properties which bring about the convulsions. The author emphasizes the relationship between the endocrine system, the sympathetic apparatus and the choroid plexus in the explanation of the hypersecretion of the latter.—*G. C. Ferrari* (Bologna).

3202. **Saunders, A. M.** *Fluctuation in the hydrogen ion concentration of saliva in epilepsy.* *J. Amer. Med. Asso.*, 1928, 91, 244-245.—The fluctuations in the reaction of saliva over a period of 6 hours are greater in epileptic persons with frequent seizures than in those with infrequent seizures, and these in turn exhibit greater irregularities than do normal persons.—*G. J. Rich* (Bellevue Hospital).

3203. **Schindler, R.** *Nervensystem und spontane Blutungen mit besonderer Berücksichtigung der hysterischen Ecchymosen und der Systematik der hämorrhagischen Diathesen.* (The nervous system and spontaneous bleeding with special consideration of hysterical ecchymosis and the system of hemorrhagic diathesis.) *Beihefte z. Monatsschr. f. Psychiat. u. Neur.*, 1927, No. 42.—The observations of the author have shown spontaneous skin bleeding to originate through the influence of the nervous system exclusively. In hysteria skin hemorrhage can occur with a normal blood condition and can be looked upon as the expression of certain psychic processes. Such a psychic origin is present in the stigmatized persons of the Middle Ages, in whom it was produced by a desire to experience the sufferings of Christ, and also in those possessed persons who believed that they felt the blows of the devil upon their skin, the traces of the

blows being visible. The knowledge of these phenomena is of forensic importance, since skin ecchymosis has demonstrative value neither in the case of self-inflicted blows nor in attempts at assault if the injured person has a psychopathic constitution. Complete bibliography.—*H. E. Freiberg* (Breslau).

3204. **Serejski, M.** *Die Psyche bei hypophysären Störungen.* (The mental condition in disturbances of the hypophysis.) *Monatsschr. f. Psychiat. u. Neur.*, 1928, **57**, 40-50.—On the basis of two of his own cases and the cases presented in the literature the author attempts to classify the mental condition in cases of hypophysis disturbance into 4 groups: (1) without mental deterioration, (2) change of character and temperament with or without intellectual defects (the author's cases), (3) psychotic disturbances similar to the somatic type of psychoses (closely connected with the exogenous reaction type), (4) genuine psychoses. Bibliography.—*H. E. Freiberg* (Breslau).

3205. **Skalweit, W.** *Über Zwangsantriebe und psychische Zwangszustände im Gefolge der Encephalitis epidemica.* (Compulsive urges and compulsive psychic conditions following epidemic encephalitis.) *Monatsschr. f. Psychiat. u. Neur.*, 1928, **57**, 11-39.—The author contributes three cases of postencephalitic Parkinsonism in which the typical Parkinson syndrome receded and a single complexly coordinated motor disturbance predominated. The first case showed a compulsive stare ("Blickzwang" oder "Schauanfall") with simultaneous torsion of the entire body on the same side. This symptom is defined as a physiologically conditioned adversive automatism, but following encephalitic changes it is aroused in an abnormally easy manner. The second case was characterized by a feeling of weakness with "internal tremor" and the feeling that the head had to be turned to the side. In the third case peculiar attacks of staring with aphonia appeared before the lethargy. The author believes on the basis of these cases that encephalitic symptoms show the same mechanism as hysterical phenomena. He cites a number of authors who are of the opinion that a subcortical mechanism is involved in hysteria, a functional lesion of the same pathways organically destroyed in encephalitis. He introduces new points of view which would place the main seat of psychic phenomena subcortically, in which connection the dogma of the "supremacy of the cortex" is being called into question more and more.—*H. E. Freiberg* (Breslau).

3206. **Souques, A.** *Note sur les troubles de écriture pendant les absences épileptiques et sur l'intérêt psychologique et médico-légal de ces troubles (automatisme comital graphique).* (A note on the disorders of writing during epileptic seizures and on the psychological and medico-legal interest in these disorders—graphic comital automatism.) *Rev. Neur.*, 1928, **35**, 353-360.—There are two principal elements in writing: writing proper, that is, the tracing of letters and their grouping, and ideography, corresponding to two different mechanisms—the one being motor and the other psychological. If an individual who is busy writing has an epileptic attack, he may behave in several ways. In general, he may cease to write or he may continue. In the case of those who continue writing, the influence of the attack has two marked forms. In certain cases the writing proper is the thing affected, and the phrases remain sensible and correct; in other cases the ideography is affected, the form of the letters being unmodified. Here the general aspect of the letter remains the same, although incoherence appears abruptly. The author thinks that the explanation of this dissociation lies in the degree of depth of the attack.—*Math. H. Piéron* (Sorbonne).

3207. **Steck, H.** *La conception psychiatrique de l'épine organique.* (The psychiatric conception of organic difficulty.) *Schweiz. med. Woch.*, 1927, **57**, 419-422.—Practitioners of internal medicine, and especially the psychiatrist, should pay very special attention to the relations between the physical world

and the mental world of the organism, of which the sympathetic system is the unifying bond. For a medical understanding of the neuroses arising from internal disorders, the conception of the organic difficulty, that is the organic basis of these disorders, is of primary importance. Emotion directs its effect toward the weakest point of the organism and this necessitates a certain moral consciousness of his health on the part of the organism in order to set up a resistance at that point; the psychological factor plays the rôle of arbitrator in many of these cases. Among the insane who are afflicted with serious organic disorders, one finds in every case a delusion of interpretation of the pathological symptoms. Due to the prelogical mentality of the schizophrenies their ideas of persecution crystallize around this organic disorder, sometimes long before a medical examination can establish the presence of a lesion. The affective condition is then the very precise expression of the true state of the vital centers.—*M. R. Lambcier* (Geneva).

3208. **Steck, H. Psychiatrie et biologie.** (Psychiatry and biology.) *Schweiz. med. Woch.*, 1927, **57**, 436-441.—In this opening lecture in his course as *privat-docent*, the author brings together the various concepts of the regression of motility and of psychism according to the works of H. Jackson, Th. Ribot, C. v. Monakow, P. Janet, S. Freud and L. Lévy-Bruhl. He attempts to show that the psychoses may find an explanation which will gather the mental disorders under a biological setting.—*M. R. Lambcier* (Geneva).

3209. **Stern, F. Über psychische Zwangsvorgänge und ihre Entstehung bei encephalitischen Blickkrämpfen. Mit Bemerkungen über die Genese der encephalitischen Blickkrämpfe.** (Psychic compulsive activity and its origin in encephalitic ocular spasms. With remarks on the genesis of encephalitic ocular spasms.) *Arch. f. Psychiat.*, 1927, **81**, 522-560.—Feelings of anxiety appear before the ocular spasms with a cessation of thought at a certain point, e.g., upon putting the question why the 0 is round, counting from 1 to 100 and back, etc. Clinical functional tests show that with the inability to move the eyes voluntarily on account of tonus abnormal compensatory movements appear upon forceful movement of the head by the doctor, which show the entire vestibular apparatus inclusive of the posterior longitudinal bundle to be in a pathologically irritable condition. The localization of the ocular spasms themselves is as yet uncertain, perhaps scarcely in the corpus striatum; the lesion may be quite minimal and changing from case to case. In all events these are processes found in the brain stem in uniform association with the bases of psychic spasms of thought. This points to the importance of the brain stem for the affective and the intentional.—*W. Wirth* (Leipzig).

3210. **Straus, E. Untersuchungen über die postchoreatischen Motilitätsstörungen, insbesondere die Beziehungen der Chorea minor zum Tic.** (Studies of postchoreic motor disturbances with special reference to the relation of chorea minor to tic.) *Monatsschr. f. Psychiat. u. Neur.*, 1927, **66**, 261-324.—Of 25 patients who had suffered from chorea minor, in studies made on the average 15 years later, only 10 showed (independent of residuals) definite slight dyskinetic tic disorders of the extremities and of the facial and respiratory musculature. One case called to mind the ocular spasms of postencephalitic origin, except that the etiology in these ten cases differed from the total average. Complete bibliography.—*W. Wirth* (Leipzig).

3211. **Unger, W. Differentialdiagnose der Psychoneurosen, funktionellen Neurosen und Erschöpfungszustände. Band II, 2 der Praktischen Differentialdiagnostik.** (Differential diagnosis of the psychoneuroses, functional neuroses and states of exhaustion. Vol. II, 2 of *Practical Differential Diagnosis*.) Dresden & Leipzig: Steinkopff, 1927. Pp. viii + 136.—The diagnosis of the psychoneuroses, etc., must be strictly individualizing and in great part psycho-

logical. The end to be aimed at is the finest possible "psychology of the personality." The systematic review given in this book includes: states of exhaustion; constitutional neurasthenia; psychasthenia; the nervous character (Adler); organ neuroses; viscerai neuroses; hysteria (hysterical reaction, hysterical character); traumatic neurosis; impulsive neuroses; anticipation neuroses and anxiety neuroses; unstable psychopaths; migraine; epilepsy; mixed phenomena of nervousness; combination of bodily and mental disturbances; therapeutic importance of individualizing diagnosis. Following this, the author gives some information as to the method and technique of diagnosis: anamnesis (with an addendum concerning constitutional and circumstantial conditions of illness); study of the bodily constitution; relation of the bodily to the mental constitution; study of the visceral nervous system. Concerning precise psychological investigation: Lowenstein's graphic representation of the finest expressive movements; psychogalvanic reflex (Veraguth); the association studies of Jung and Bleuler; psychoanalysis (exposition, critique, technique); the science of expression and the study of character. In the third part the author discusses differential diagnosis from symptoms and syndromes. The following are mentioned as guiding symptoms: debility; viscerai disturbances; sexual disturbances; disorders of sleep; headache; other pains of the neurotic; convulsions and fits; disorders of the flow of ideas and of association; impulsive thoughts; alterations of consciousness; alterations of irritability and emotionality; variations in disposition; disorders of the will. A bibliography and a subject index are added.—W. Unger (Hohenpeissenberg, Oberbayern).

3212. Vercelli, G. *Contribution à l'étude clinique et pathogénétique des syndromes siringomyéliques.* (A contribution to the clinical and pathogenetic study of the syringomyelic syndromes.) *Riv. di pat. nerv. e ment.*, 1928, 33, No. 2.—From the observation of three patients the author concludes: (1) that in the pathogenesis of syringomyelia the injury has a secondary significance in relation to the predisposition; (2) that curvature of the vertebral column may for some time be the characteristic symptom of syringomyelia—this is due in general to osteoarticular dystrophy, rather rarely to muscular paralysis; and (3) that the only effective treatment is roentgenotherapy.—G. Corberi (Milan).

3213. Wahl, L. *Les études de psychiatrie constitutionnelle.* (Studies of constitutional psychiatry.) *Hygiène ment.*, 1928, 23, 81-83.—Math. H. Piéron (Sorbonne).

3214. Waschetko, —, & Seletzky, —. *Einige Daten betreffend die physikalisch-chemischen Umänderungen des Blutes bei experimenteller Epilepsie. Vorläufige Mitteilung.* (Some data on the physico-chemical changes of the blood in experimental epilepsy. Preliminary communication.) *Arch. f. Psychiat.*, 1927, 82, 232-246.—Among others, the change in the electrical conductivity of the blood is determined. It may be that epilepsy is not an independent disease but a clinical symptom of metabolic dyscrasia.—W. Wirth (Leipzig).

3215. Weger, A. *Thalamischer Symptomenkomplex bei Formalinintoxication.* (Thalamic symptom complex in formalin intoxication.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1927, 111, 370-382.—Workmen were studied who inhaled formaldehyde fumes in the production of "Rigilit" in a part of the "Elektrosila" factory in Kharkov. Since (especially) temperature disturbances and excessive perspiration appeared with sensory disturbances on the right side, the (left) optic thalamus and neighboring structures seemed to be injured, the tuber cinereum most of all (hypothalamic symptom complex). In thalamic disease (as distinguished from cortical lesions) first the proximal and then the distal portions of the body are affected, which are rigidly localized in the thalamus as in the cortex. Further studies and practical preventive measures are instituted.—W. Wirth (Leipzig).

3216. Wellens, L. **Diagnostic de l'anormalité chez les écoliers.** (Diagnosis of abnormality in school children.) *Psychol. et vie*, 1928, **2**, 117-120.—The author stresses the importance of an early discovery of abnormal children, in order to begin as soon as possible a professional education which will permit them to take their place in society and will put them in a position to earn their living and to spend their earnings sensibly.—*Math. H. Piéron* (Sorbonne).

3217. Wilder, J., & Silbermann, J. **Beiträge zum Ticproblem.** (Contributions to the tic problem.) *Beihefte z. Monatsschr. f. Psychiat. u. Neur.*, 1927, No. 43.—Detailed studies of organic and functional ties on the basis of abundant material (several hundred cases), in which the psychological aspect of the organic tie is also considered. Information on special cases.—*H. E. Freiberg* (Breslau).

3218. Yepsen, L. N. **Objective estimation of social behavior.** *Tr. School Bull.*, 1928, **25**, 33-41.—Progress report of an investigation. A personal behavior score card is presented which offers a means for objective estimation of social behavior.—*E. M. Achilles* (Columbia).

3219. Ziegler, L. H. **Follow-up studies on persons who have had epidemic encephalitis.** *J. Amer. Med. Asso.*, 1928, **91**, 138-141.—Seven hundred and fifty-two persons, who had had encephalitis for an average of five and a half years, were traced. Patients recover from acute severe attacks, from behavior difficulties and other residual sequelae, but rarely, if ever, from the parkinsonian syndrome.—*G. J. Rich* (Bellevue Hospital).

[See also abstracts 3010, 3013, 3046, 3063, 3070, 3071, 3089, 3109, 3129, 3145, 3259, 3260, 3284.]

#### SOCIAL FUNCTIONS OF THE INDIVIDUAL

3220. Bain, R. **An attitude on attitude research.** *Amer. J. Sociol.*, 1928, **33**, 940-957.—The concept of attitude is vague, subjective, and inconsistently used. Attitude common to the group are values in the Thomasian sense, representing status-fixing behavior.—*E. R. Groves* (North Carolina).

3221. Berneys, E. T. **Manipulating public opinion: the why and the how.** *Amer. J. Sociol.*, 1928, **33**, 958-971.—Public opinion in the narrow sense is the thought of a society at a definite time; broadly it is the power of the group to influence the larger public in its attitude. Introspective psychology reveals the process of doing this better than does experimental psychology. It is possible to construct a technique for breaking down traditions and prejudices and establishing new attitudes.—*E. R. Groves* (North Carolina).

3222. Boas, G. **The esthetic of Leo Stein.** *J. Phil.*, 1928, **25**, 287-293.—An appreciative review of Leo Stein's book, *The A-B-C of Aesthetics*.—*A. P. Brogan* (Texas).

3223. Bogardus, E. S. **Immigration and race attitudes.** New York: Heath, 1928. Pp. xi + 268. \$1.80.—The author presents a factual and statistical study of racial attitudes, which lie at the heart of race problems and race conflicts. He uses data from three surveys in which he has participated: the Pacific Coast Relations Survey, the Mexican Immigrant Survey of the Southwest, and the Social Distance Studies. In the latter study 1725 native-born citizens of the United States gave their reactions to 40 different races. The results are presented in tabular form showing the social distance ("the lack of understanding and fellow feeling") between various race groups. Graphs show variations according to age, sex, religion and region. 700 persons reported experiences in which racial attitudes, either antipathy or friendliness, originated or changed.

These records, together with those from the other surveys, furnish a vast amount of case material which is used to illustrate and emphasize principles throughout the book. Personality, public opinion, education and social service are discussed as factors in racial adjustment. Projects and a bibliography are listed in connection with each topic.—*L. M. Harden* (Clark).

3224. **Cabinet Bureau of Statistics, Japanese Government. Average marriage age in Japan.** *Tokei-jiho* (Statistical Bulletin), 1925, No. 5.—In 1899 the average age of husbands at marriage was 27.6, that of wives 23.0. Since then the average marriage age for husbands and wives has increased gradually. In 1919 husbands married on the average at 29.2, wives at 24.3. In the same year the average marriage age of husbands in England and Wales was 29.0, that of wives 27.2; in Holland husbands married at 29.7, wives at 28.0; in Belgium husbands married at 29.0, wives at 26.5; in Switzerland husbands married at 30.7, wives at 27.4. The average of these gives 29.8 for husbands and 27.3 for wives. The average marriage age of Japanese husbands is very close to this average age of foreign husbands, but Japanese wives marry 2.9 years younger. From 1920 the average marriage age decreased steadily. In 1922 husbands married at 28.8, wives at 23.9; in 1923 husbands married still younger at 28.6, wives at 23.9. As to the age difference between husbands and wives it was found that in 1899 the age difference was 4.6; in 1904, 4.4; in 1909, 4.7; in 1914, 4.7; in 1919, 4.9; in 1922, 4.9; in 1923, 4.8. There is a tendency toward slight increase. In the six biggest cities husbands married during these years 2.8 years later, wives 2.0 years later, as compared with the general averages. In these cities husbands married at 31.3, wives at 25.8 in 1909; husbands at 32.2, wives at 26.5 in 1919. Since 1920 there has been a slight decrease.—*J. G. Yoshioka* (California).

3225. **Cory, H. E. The concept of expression in esthetic theory.** *J. Phil.*, 1928, 25, 40-53; 57-71.—A critical account of the notion of expression in the expressionists and in the theories of Croce and of Santayana.—*A. P. Brogan* (Texas).

3226. **Dam, C. H. The Indian.** *Amer. Mercury*, 1928, 13, 331-334.—A brief account of recent ethnological work on the various tribes of North American Indians.—*J. T. Metcalf* (Vermont).

3227. **de Garis, C. F., & Swartley, W. B. The axillary artery in white and negro stocks.** *Amer. J. Anat.*, 1928, 41, 353-396.—This article should be read by those interested in physiological evidence as to innate race differences. It is illustrated by ten diagrammatic figures. "The topography of the axillary artery was specially studied in eighty-two dissections. . . . Twenty-three patterns of branching are described. There are, as norms in man, two diverse patterns of the axillary artery; the pattern with the more disparate branching prevails in whites, that with the more clumped branching prevails in negroes. . . . There are, as variations, two diverse tendencies in the axillary patterns, the tendency toward more disparate patterns characterizing variations in whites, the tendency toward more clumped patterns characterizing variations in negroes. . . . There is (also) more diversity of pattern in the axillary artery of negroes than in that of whites. . . . In considering . . . (this) it is well to recognize, even if we do not separate, at least two factors: (1) Specific racial difference, and (2) indeterminate racial mixture. . . . From the available evidence we cannot say whether this is . . . a true racial difference or simply an average result of racial mixture, since we do not know what the norm of pure negro stock is."—*E. Gaw* (Ohio State).

3228. **de Laguna, G. A. Linguistics and the psychology of speech.** *J. Phil.*, 1928, 25, 75-78.—A reply to a review of her book *Speech* by L. H. Gray.—*A. P. Brogan* (Texas).

3229. **Ducasse, C. J.** *What has beauty to do with art?* *J. Phil.*, 1928, 25, 181-186.—*A. P. Brogan* (Texas).

3230. **Eliot, T. D.** *Cures and cure-alls.* *J. Abn. & Soc. Psychol.*, 1928, 23, 16-27.—If medicine is just beginning to understand and control the transmutation and direction of energy in the body, it is sufficiently apparent that social science is still in the stage of alchemy. If, however, medicine, through such insight as its faith and works have brought, has progressed so far, we may hope, at least, for a day when the equilibration and direction of social forces to desired ends, though still a venture and an adventure, may be increasingly accomplished through scientific knowledge and foreknowledge.—*C. H. Johnson* (Boston Psychopathic Hospital).

3231. **Ellwood, C. A., & others.** *Recent developments in the social sciences.* Philadelphia: Lippincott, 1927. Pp. vii + 427.—An interpretation by various authors of the development and trends of the major specialized fields of the social sciences in the effort to reveal their interdependence. “Students have arrived at the realization that ‘social science is not many but one’ and a new understanding of the injunction to ‘see life steadily and to see it whole.’” (P. vi.) The book traces the recent developments in Sociology (Ellwood, C. A.), Anthropology (Wissler, C.), Psychology (Gault, R. H.), Cultural Geography (Sauer, C. O.), Economics (Clark, J. M.), Political Science (Merriam, C. E.), History (Barnes, H. E.)—*E. R. Groves* (North Carolina).

3232. **Farnsworth, P. R.** *The discrimination of major, minor, and certain mistuned chords.* *J. Gen. Psychol.*, 1928, 1, 377-379.—Using the terpometer special ability test, devised by Max Meyer, it was found that “Broken mistuned chords . . . are more often discriminated as minor than as major chords. . . . Mistuned and major chords are easier to discriminate than minor chords. . . . An increase in the time rate of tonal presentations increases the accuracy of discrimination. . . . Where the chords are played as simultaneous rather than as successive sequences, the discriminations are facilitated even more than with increases in the speed of successive presentations.” 4 tables.—*H. Cason* (Rochester).

3233. **Fromm, H.** *Sprachliche Formgebung und ästhetische Wertung.* (Language formation and aesthetic valuation.) Göttingen: Kroh, 1927. Pp. 46. 3M.—Studies in the aesthetic experience published by O. Kroh, Vol. 3. By means of presentation of sentence examples and strophes from songs in several versions to pupils, students and others, with the question why one version stood out among the others, it was expected to determine what “called forth aesthetic appreciation in literary objects apart from aesthetic content.” The statements were arranged according to Groos’s attitude types, the emotional valuation (pleasure and displeasure), the voluntary (wishing and not wishing), and the intellectual evaluation (appreciation and refusal). The author considers the “agreeableness of the reception” to be the common criterion for all aesthetic evaluation. To children and adults the same rules of judgment are basic; the youngest, however, prefer “simple, common modes of expression.” Upon entering school children make decisive progress in the development of the aesthetic judgment.—*H. Jancke* (Bonn).

3234. **Garth, T. R.** *Racial minds.* *Psyche*, 1928, 8, 63-70.—Some evaluation of the races of men must be made because of the fact that the barriers placed between races have largely been removed. The evaluation must not be made on a basis of prejudice, but on a basis of scientific determination of the value of the races. Race prejudice is a case of rationalization to justify our dislike for the strange. Intelligence tests have been administered to most of the races in the world. The results show that the Chinese and Japanese are about as intelligent as the whites, but the Negroes, Mexicans and Indians are considerably lower.

But there is some doubt whether these intelligence test results are fair measures of the last three groups, because of differences in social status, and, in two cases, language difficulty. However, the yellow peoples have succeeded with the white man's test where the others have so far failed.—*T. R. Garth* (Denver).

3235. **Garth, T. R.** *The intelligence of Mexican school children.* *School & Soc.*, 1928, **27**, 791-794.—The author and his assistants tested with the National Intelligence Test 1004 of the Texas, New Mexico, and Colorado Mexican school children found in Grades 4 to 8. The median I.Q. for the group was 78.1. 80% of the children, on the average, were discovered to be scholastically retarded. The inter-relationships of age, grade, and test score are considered.—*H. L. Koch* (Texas).

3236. **Goddard, P. E.** *Pitch accent in Hupa.* *Univ. of Calif. Publ. Amer. Archaeol. & Ethnol.*, 1928, **23**, 333-338.—The author's second report on a laboratory method (1902-1904) used to record words from the Hupa language. With the aid of the Rousselot apparatus tracings of Hupa words were made. These tracings were placed on cards on which, for comparison, the spoken word was typed and the speed of the cylinder noted. Lists are given of 5 almost completely conjugated verbs; opposite each form is noted the wave length of the vowels and the relative pitches of the syllables of the word.—*M. Goodrie* (Clark).

3237. **Gutzmann, H.** *Physiologie der Stimme und Sprache.* (Physiology of the voice and speech.) Friedrich Vieweg & Son, A. G. Braunschweig, 1928. Pp. 248.—93 illustrations, some colored. The book presents the most modern and most complete orientation in the field of the physiology of the voice and speech, without making any claim to the exhaustive treatment of a textbook. Upon the classic form which was given by Gutzmann Sr., it builds organically the newest theories in all fields and considers especially the work of Stumpf, Nadeleczny, Panconcelli-Kalcia, K. L. Schäfer, Wethlo, Zwaardemaker and Struycken. The two main parts, physiology of breathing and the voice and physiology of speech sounds, have an anatomic basis from which are developed the physiology of respiratory movements and physiology of the voice. The physiology of the oral cavity is treated with detailed discussion of technical methods of registration and direct measurement. The speech sounds are then treated individually as well as in their relation with the articulatory basis. The phonetic differentiation between speech and song, with a brief observation on phonetic writing, closes the book. Complete review of the literature of the entire field.—*Scholz* (Görlitz).

3238. **Hamilton, G. V., & MacGowan, K.** *What is wrong with my marriage.* *Woman's Home Companion*, 1928, **40**, No. 7, 11; 72-74.—100 husbands were asked what is wrong with their marriage. The responses are here presented in a general way.—*M. Goodrie* (Clark).

3239. **Hawley, F.** *Verbal forms and functions.* *Psyche*, 1928, **8**, 3-17.—The article is an account of what Cassirer has to say on language in his various contributions on linguistics and mythology, with special emphasis on the forms and functions of the verb. In the first place Cassirer endeavors to show that language can be understood only from the standpoint of a philosophical idealism. The idea of space is of great importance in connection with the verb in many native languages. This is in disregard, relatively, of temporal and qualitative distinctions. For the native consciousness a form of activity cannot be separated from its local existence—the point of departure. In many native languages we find a wealth of "tense forms." Again, in many of these languages, plurality is in the verb not merely when we have a plurality of subjects, but when the same subject acts upon several objects. The voices of the verbs are found to be of interest; the primitive languages even make a sharp distinction, often, between

the doer and the receiver of the action. Cassirer's work is the first attempt in this century at writing a treatise on general linguistic comprehending a large number of native languages.—*T. R. Garth* (Denver).

3240. **Hay, O. P.** *On the antiquity of relics of man at Frederick, Oklahoma.* *Science*, 1928, 67, 442-444.—*G. J. Rich* (Bellevue Hospital).

3241. **Hertz, F.** *Race and civilization.* (Trans. by A. S. Levetus and W. Entz.) New York: Macmillan, 1928. Pp. ix + 328. \$6.00.—This book reviews the arguments for race superiority from the Greeks to the present. It does not consider the arguments for race equality in the same comprehensive way. At the outset the author deplores the recent growth of separative instincts, regarding this as something new in the world. The fundamental factor in race antagonisms is identified as the universal dislike for foreigners. The existence of anatomical race characters is recognized, but these are regarded as of no functional significance. Evidence for the inheritance of mental and temperamental characters is denied. Language has no biological significance, nor are there superior languages. After a detailed analysis of the work of Chamberlain and others the conclusion is that the blonds have played but an ordinary rôle in European culture. Race crossing is found not detrimental, but on the contrary beneficial, and the mixed races are superior, as proven by the Jews, a people of "manifold crossings." That mixed races decay faster than others is rejected. The author regards the fundamental psychological equality of all peoples as self-evident, and parallelism in culture as one of the many proofs of this. In respect to war, he considers warlike peoples not as superior biologically and mentally, but that they appear so because they disregard tradition and encourage liberty of thought; yet they are soon habituated to peaceful ways. All great social advances are made possible by great conquerors, but their race is not a factor. Teutonic peoples are regarded as the leaders of civilization and so socially superior, but not because of their ancestry. Teutonic peoples regard others as inferior, but the psychological origin of all race-superiority attitudes lies in self-interest and the desire to exploit others. All such feelings are regarded as unethical; the superior social order should not acknowledge its superiority, but try to equalize everywhere.—*C. Wissler* (Yale).

3242. **Klages, L.** *Die "religiöse Kurve" in der Handschrift.* (The "religious curve" in handwriting.) *Zsch. f. Menschenk.*, 1927, 2, 1-8.—In his discussion of the aesthetics of space the author states that everything of higher existence has the significant accent of "superiority," at any rate always in the sense of something of greater value. Normally spatial symbolism exercises no influence on the configuration of the handwriting, since zeal, ardor, etc., do not at first have any need for the form of letter but are expressed immediately through the acceleration of movement. It might be otherwise if particular kinds of zeal could be observed. Here belong all cases of religiosity, without necessarily limiting the concept accurately. For through internal inclinations man feels himself drawn toward something immeasurably higher. The upward extension of the concluding strokes in the writing may show this in spatial symbolism. There are numerous very fine differences. The present time is basically irreligious, but romantic poetry shows signs of piety.—*A. Römer* (Leipzig).

3243. **Klineberg, O.** *An experimental study of speed and other factors in "racial" differences.* *Arch. Psychol.*, 1928, 15, No. 93. Pp. 109.—The author suggests that several non-racial factors may have contributed to what have seemed to be racial differences in earlier experimental work; language, schooling, culture, social and economic status, rapport, motivation, sampling and speed are among the factors mentioned. In the present investigation the Pintner-Paterson series of tests were given to Indian groups in three places and to negro groups in six places all within the United States. The author concludes: The white are su-

perior to the Indian and negro children in performance test in *time* rather than in *accuracy*. Great speed of white children is more probably determined by environmental than by racial differences.—*E. M. Achilles* (Columbia).

3244. **Kroeber, A. L.** *The anthropological attitude.* *Amer. Mercury*, 1928, 13, 490-496.—The author presents the view that anthropology is just one phase of a widespread mental attitude. This attitude is the result of culture becoming aware of itself. Culture has existed and developed for ages, but only in recent times has it "finally reached the abnormal—and possibly pathological—point where it is beginning to be culturally introspective." The author discusses the nature of culture, pointing out that it is not only organic but creative as well. He also considers the various disciplines which deal with culture and their relationship to each other.—*J. T. Metcalf* (Vermont).

3245. **Merriam, C. H.** *An-nik-a-del: the history of the universe.* Boston: Stratford, 1928. Pp. xi + 166. \$2.00.—A group of Modesse Indian (Pit River, California) myths which the author obtained from a leader of the tribe. There are marked likenesses in fundamental details to myths of other peoples and other Indian tribes: there are two preexisting deities, of whom An-nik-a-del seems to correspond to our Christ; during the Flood, in which the world was destroyed, the First People were changed into animals and after that the first Real People (Indians) appeared. There are additions, also, as, for example, the story of how the Sun and Moon were changed from West to East and shot up into the sky.—*M. Goodrie* (Clark).

3246. **Murphy, G.** *A note on method in the psychology of religion.* *J. Phil.*, 1928, 25, 337-345.—The scientific study of the psychology of religion has been mainly aided by abnormal psychology, child psychology, and animal psychology. We have not yet done adequate work in studying the more serious forms of religion, as in genuine mysticism. More quantitative and genetic studies are needed.—*A. P. Brogan* (Texas).

3247. **Mursell, J. L.** *Principles of musical education.* New York: Macmillan, 1927. Pp. 295.—This book appears in the Experimental Education Series. Besides the text proper there are questions and exercises and a bibliography of seventy references (up to 1923). Part 1, *Musical Mind*, contains chapters on auditory experience, rhythmic experience, musical intelligence, musical feeling, and meaning in the musical mind. In Part 2, *Functional Outcomes of Musical Training*, will be found chapters on training for musicianly listening, performance, and composition. Part 3, *Agencies of Musical Education*, contains discussions of music in the schools, studio music lesson, practice and drill, auxiliary agencies for musical education, status of the studio music teacher, and stages in musical development.—*P. R. Farnsworth* (Stanford).

3248. **Obata, J.** *Experimental investigations on the accent in Japanese.* *Jap. J. Psychol.*, 1928, 3, 157-174.—Oscillographic records of mono- and bisyllabic words in Japanese pronounced by two men and women were made with a condenser-microphone (duralumin membrane), several-stage vacuum tube valve amplifier, and Duddell high-frequency oscillograph. The amplifier was connected throughout with resistance-capacity couplings. The records were transcribed into nearest musical notations in terms of frequency. It was found that consonants failed to be graphed as desired; the graphs showed mainly vowel sounds. The analysis of the graphs showed that the accent in Japanese depends mainly on the relative pitch of the accented syllable, and not on the intensity of the sound. The pitch difference between an accented syllable and a syllable that follows was two to three intervals of musical scale; an extreme case showed an interval of five.—*J. G. Yoshioka* (California).

3249. **Odum, H. W.** *Man's quest for social guidance.* New York: Holt, 1927. Pp. xxi + 643. \$4.50. (Student's ed., \$3.60).—The purpose of this

volume, according to the author, is to approach the scientific study of human society through the study of social problems and social relationships. The book covers a wide range; indeed, it is a very comprehensive discussion of social relationships with no attempt at intensive discussion of any of these. The thirty-four chapters divide themselves into six units, covering the following: An approach in method and spirit to the whole subject of social relationships; the objectives of society as found in the development of the social personality; the great forces found in social change; the larger social relationships bounded by the development of world community; social relations as found in major social institutions, centering particularly around the family; social values and social progress, including the general fields of social work and utilization of social science. The individual in his various relationships, the family, the community, racial, national, international problems, youth and society, woman and society, education and the adult, problems of rural life, of industry and of labor—all these are given some measure of attention. For those to whom first hand experience in the social field is not available, the book offers an opportunity for knowing, through reading, many current problems in the social field. Through the bibliography and references, as well as outlines for further study, it affords many leads for practical discussion of the topics included and for research.—A. F. Bronner (Judge Baker Foundation).

3250. Oehlmann, E. *Sprachentwicklung und Milieu*. (Language development and environment.) *Neuphilol. Mitteilungen*, 1927, 28, 75-89.—The author points out the difficulties and the limitations. He differentiates only two levels, an upper and a lower, according to the stage of organization. Few preliminary works are yet available on accent, melody and rhythm. The field of syntax appears relatively clear. Here it seems that the upper level exhibits an abundance of innovations; the simple paratactic sentence structure of the lower level is based on the "incapacity of the lower level for more highly developed thought continuity." In the field of word formation the vocabularies of the different levels show qualitative differences which make comparison more difficult. In spite of the conservative trend of the peasant dialect it seems to be undergoing a rather free phonetic alteration. From the results: One may rightly doubt whether true linguistic life occurs in the middle and lower levels.—A. Römer (Leipzig).

3251. Park, R. E. *Human migrations and the marginal man*. *Amer. J. Sociol.*, 1928, 33, 881-893.—Migrations of peoples result in collisions and start every advance in culture. At present, although individuals are more mobile, migrations are relatively less. Both types of movement break down custom and give the individual a new social beginning. He who attempts to adjust to the old and the new culture is the marginal man, unstable, the battleground of the conflicting cultures. It is he who reveals new civilization in the making.—E. R. Groves (North Carolina).

3252. Picco, R. *La stratificazione sociale dell' intelligenza*. (The social stratification of intelligence.) *Riv. di Sociol.*, 1927, 1, 206-214.—Various investigators have attempted to prove the intellectual superiority of the upper social classes to the economically lower classes, and statistics tend to show that even the diffusion of education has not produced great men among the workers. Nevertheless, since history has proved that privileged positions are acquired more by aggressive traits than by superior intelligence and that the higher classes are always replenished from below, the author advocates the abolition of hereditary privileges and equal opportunity for all classes to rise on the social ladder by virtue of merit.—R. E. Schwarz (George Washington University).

3253. Piccone-Chiodo, M. *La teoria bio-sociologica del delitto*. (The bio-sociological theory of crime.) *Riv. di Sociol.*, 1927, 1, 273-281.—Although bio-

logical factors underlie crime, the direct causes of crime are social conditions. Pain and pleasure are the mainsprings of animal and human activity. Primitive man killed because of the pain caused by hunger, but the normal act of the primitive has become a pathological or criminal act. Not only pain but also the absence or prohibition of higher pleasures forces man to take refuge in lower or bestial pleasures. The satisfaction of needs, which may also be considered in terms of pain and pleasure, is complicated by modern social conditions. The upper classes find it easy to satisfy their needs, but the poor must usually resort to crime.—*R. E. Schwarz* (George Washington University).

3254. **Pratt, C. C.** *Bisection of tonal intervals larger than an octave*. *J. Exper. Psychol.*, 1928, 11, 17-26.—For auditory intervals smaller than an octave the midpoint lies at the geometrical mean, no matter whether the intervals are perceived as auditory distances or musical qualities. This fact has been attested by the bulk of experimental work on the bisection of intervals and the direct comparison of intervals. The apparent size of intervals which extend beyond the range of an octave has been a matter of dispute. Stumpf gave it as his opinion that the apparent size of the same interval increases with increase of pitch. The results of the present experiment indicate that if an auditory distance larger than an octave is taken as a *musical interval* the midpoint still remains near the geometrical mean, but that if it is taken as a given separation of auditory qualities the midpoint moves up toward the arithmetical mean.—*F. A. Pattie* (Harvard).

3255. **Rahn, C.** *Science and the religious life: a psycho-physiological approach*. New Haven: Yale Univ. Press, 1928. Pp. vii + 221. \$3.00.—There is no necessary connection between the naturalistic hypothesis and the attitude of despair which represents a decreased energy output. In recent times this hypothesis has been closely related to the doctrine of biological finalism which holds, perhaps implicitly, that organic evolution has come to term in man and that further evolution will be along social lines. This doctrine is less a reasoned conclusion than a "biologically determined attitude which operates in maintaining the physiological *status quo* of the species." Except for this doctrine of finalism, modern naturalism might hold forth a prospect which would enlist the faith and hope of mankind. There is no inherent reason why science and the world views of science should not tap the same springs of hidden energy in man which have been utilized in the religious experiences of the race and the individual. Rahn suggests that the future evolution of man may come in the field of internal chemical processes rather than in that of gross anatomical changes.—*W. S. Hunter* (Clark).

3256. **Randolph, V.** *A survival of phallic superstitions in Kansas*. *Psychoanal. Rev.*, 1928, 15, 242-244.—A phallic stone on the University of Kansas campus, and the customs and superstitions regarding it, are described.—*W. Dennis* (Ohio State).

3257. **Rice, S. A.** *Quantitative methods in politics*. New York: Knopf, 1928. Pp. xxii + 331. \$3.00.—This is a collection and expansion of the papers published by the author to illustrate possible applications of statistical technique to the study of polities. The opening chapters discuss methodology. It is argued that physical scientists wittingly or not adopt the statistical view of the perceptual world which is also capable of extension to social data. The case study and statistical procedures in history and science are presented as complementary and not exclusive methods. Special devices are proposed to detect "stereotyped" attitudes, and to measure distributions of opinion among many individuals (which the author thinks tend toward the normal curve). He applies the culture area hypothesis of the anthropologists to regional distributions of attitude, and undertakes to separate urban, village, open-country, economic, sex, religious, nationality

and race components. An effort is made to test the hypothesis that elected officials are actually representative of their constituencies. The voting behavior of legislative groups is stated by means of indices of cohesion within individual groups, and of likeness among groups. A method of identifying blocs is proposed. Illustrations of the problem of measuring attitude changes in response to specific stimuli are given. The time series method is used to display cycles in party turnover.—*H. D. Lasswell* (Chicago).

3258. **Roalfe, W. R.** *The psychology of suicide.* *J. Abn. & Soc. Psychol.*, 1928, **23**, 59-67.—The increasing prevalence of suicide makes it a subject of general interest. The study of pronounced cases has thrown certain unconscious processes into clear relief where they can be worked out in detail. Those processes which become pronounced in extreme cases have been found to be operative in all persons, but in a less conspicuous manner. In regard to our general psychology suicide does this thing. It shows us clearly in what some of the unconscious factors in our own struggles consist. We all struggle with our rudimentary wishes, not the least of which are the avoidance of life and many of its hard realities, not to mention some of the self-realizations which we would avoid even at the price of death, either for ourselves or another.—*C. H. Johnson* (Boston Psychopathic Hospital).

3259. **Schulze, E.** *Der Reichstagentwurf eines allgemeinen deutschen Strafgesetzbuches vom Standpunkte des Psychiaters.* (The Reichstag's proposed plan of a general German penal code from the standpoint of the psychiatrist.) *Arch. f. Psychiat.*, 1927, **82**, 1-42.—The article, supplied with numerous references to the literature, is the enlarged edition of a report to the meeting of the German Society for Psychiatry at Vienna, Sept. 13, 1927. To begin with, the author discusses the determination of responsibility and its impairment as it may be conditioned by mental defects or by drunkenness, and then the measures for reformation and security in which the lower division predominates. In conclusion the resolution accepted unanimously by the meeting is formulated: that the judge shall again have the right to order commitment to a sanatorium and custodial institution, to an institution for drunks, etc., as the Reichstag's proposal provides.—*W. Wirth* (Leipzig).

3260. **Serrani, L.** *La patologia mentale e la delinquenza minorile.* (Mental pathology and juvenile delinquency.) *Riv. di Sociol.*, 1927, **1**, 282-288.—Juvenile delinquency increases at an alarming rate, the cause of which, according to André Collin of the Sorbonne University, is heredity or deficient mentality (epilepsy, idiocy or mental insufficiency). He divides the children into three classes: (1) those influenced by education and example; (2) incorrigibles; (3) an intermediate class requiring special education in special institutions, like other sick people, under the supervision of physicians and psychologists.—*R. E. Schwarz* (George Washington University).

3261. **Smith, W. C.** *Changing personality traits of the second generation Orientals in America.* *Amer. J. Sociol.*, 1928, **33**, 922-929.—There is a marked difference between the conduct of American-born Orientals and their parents. This appears in the sugar plantations of Hawaii. An effort is made to follow the pattern of the American family, while the home continues to influence language, vocation, etc. Disorganization and reorganization go on together.—*E. R. Groves* (North Carolina).

3262. **Staffelbach, E. H.** *The psychology of music appreciation.* *School Music*, 1928, **29**, 139, 9-13.—After a discussion of the various theories of music appreciation, the author decides that it is fundamentally affective in character, that is, subjective. Pleasure is thought to be derived from several sources: (1) a definite feeling-tone inherent in the auditory sensations and their rhythm; (2) associations previously formed between the musical selection or its parts and

certain previously experienced affective states; (3) associations previously formed between the music or its parts and certain persons, places, things, which are themselves invested in memory with affective significance; (4) recognitions and realized anticipations growing out of repeated hearings of the same or similar compositions; (5) the presence of such elements as surprise and novelty; (6) the listener's imagination is stimulated by music; (7) the listener is afforded opportunity for self-expression through vocal and subvocal accompaniment to the music or through overt and incipient motor responses to its rhythm; (8) recognition of the skill and technique necessary to the player or singer, and of the workmanship and genius of the composer; (9) the listener's knowledge of details more remote, such as the composer's name, details of his life, facts about the composition, where it has been played, by whom, etc.; (10) the listener's ability to interpret and hear meaning in the music. Twelve educational implications end the article.—*P. R. Farnsworth* (Stanford).

3263. **Strassmann, G.** *Die Vaterschaftsdiagnose vor Gericht mittels der Blutgruppenbestimmung.* (The diagnosis of paternity in legal proceedings by means of blood group tests.) *Zsch. f. Sex.-wiss.*, 1928, **14**, 369-376.—Only in a limited number of cases can paternity be definitely established on the basis of blood group examinations. Bibliography.—*W. Berry* (Rochester).

3264. **Utitz, E.** *Die Überwindung des Expressionismus. Charakterologische Studien zur Kultur der Gegenwart.* (The conquest of expressionism. Characterological studies on the civilization of the present time.) Stuttgart: Enke, 1927. Pp. 190. 10.80 Rm.—Utitz attempts to characterize the styles and the sense of life of the last generation and to answer the questions why expressionism is not maintaining itself and why it is being deserted now. Evaluations are to be excluded in the book. However, the necessity is proclaimed "to step vigorously on the side of being valuable, as the present time demands it of us." "A utilitarian period should lose itself in the free flow of emotions. . . . But if a period like ours needs quiet work, thoughtfulness, moderation, discipline, then it must seek for an existence that is anything but expressionistic." The classical sense of life is gaining new importance today. "To expressionism everything was expression, and it used everything as a means for expression. Things were debased, bent, and torn to pieces; they did not matter if only truth and genuineness of expression were saved." Thus the danger of a dissolution of reality was brought about. Today, expressionism is not quite gone by, but it is discredited like naturalism. As the specific conception of human nature which characterizes our time, Utitz discusses that of Klages, that of N. Hartmann, and that of psychoanalysis. There is hardly a phase of civilization which Utitz does not investigate in regard to its change from expressionism to a new objectivity.—*H. Jancke* (Bonn).

3265. **Vuilleumier, E. A.** *Low humidity and high taciturnity.* *Science*, 1928, **67**, 608.—Low humidity tends to produce parched throats and therefore to favor taciturnity.—*G. J. Rich* (Bellevue Hospital).

[See also abstracts 2966, 3050, 3056, 3087, 3093, 3116, 3124, 3125, 3131, 3146, 3176, 3196, 3218, 3279, 3287, 3291, 3292, 3293, 3294.]

#### INDUSTRIAL AND PERSONNEL PROBLEMS

3266. [Anon.] *The National Crime Commission's report on the abstract intelligence of police officers.* *Pub. Person. Stud.*, 1928, **6**, 74-80.—Criticizes the report of the sub-committee of the Crime Commission on the basis of lack of adequate data, as test scores of Cleveland police are shown to be not typical of

police in other communities. Errors of interpretation based on wrong use of Army Alpha standards are pointed out. Factors suggested as making for success or lack of it in police work are: unsatisfactory list of known necessary qualifications; overemphasis on physical traits at expense of mental ability; need for establishing minimum standard of abstract intelligence and other traits such as integrity, high moral standing, and social intelligence; promotion and salary schemes to hold better men lacking; lack of use of personnel with social service point of view and training.—*K. M. Cowdery* (Stanford).

3267. **Bénézé, G.** *Nécessité d'un emploi du temps.* (The necessity for employment of time.) *Psychol. et vie*, 1928, 2, 35-37.—*Math. H. Piéron* (Sorbonne).

3268. **Bureau of Public Personnel Administration Staff.** Suggested tests for **blacksmith**. *Pub. Person. Stud.*, 1928, 6, 90-94.—After an outline of duties, qualifications and compensation for this occupation, tests for selection of applicants for positions are suggested, to include short-answer tests of memory for oral directions; tools, materials and procedure in the trade; the Stenquist Mechanical Aptitude Test 1; a statement of education and employment; a 15-30 minute performance test; and the passing of minimum requirements on a physical examination. The battery is offered in as yet unstandardized form.—*K. M. Cowdery* (Stanford).

3269. **Bureau of Public Personnel Administration Staff.** Suggested tests to measure knowledge of statistical principles and procedure. *Pub. Person. Stud.*, 1928, 6, 109-115.—A battery of tests is proposed for measuring preparation of candidates for general statistical work. For specific positions a supplementary test or tests is expected to cover the special field involved in the work. This battery consists of short-answer tests of statistical information, terms, and practices; statistical judgment; statistical situations; calculations; ability to understand and follow written directions; and memory for oral directions. The material has not yet been standardized.—*K. M. Cowdery* (Stanford).

3270. **Bureau of Public Personnel Administration Staff.** Proposed rules for a public personnel agency, with explanatory comments. *Pub. Person. Stud.*, 1928, 6, 117-155.—Includes a section providing for the use, among other tests, of standardized tests of abstract intelligence, mechanical aptitude, social intelligence, and other special traits and aptitudes.—*K. M. Cowdery* (Stanford).

3271. **Bureau of Public Personnel Administration Staff.** Building up a municipal personnel system. 2. Cleveland. *Pub. Person. Stud.*, 1928, 6, 158-166.—*K. M. Cowdery* (Stanford).

3272. **Bureau of Public Personnel Administration Staff.** Suggested tests for **cottage master and cottage matron**. *Pub. Person. Stud.*, 1928, 6, 167-171.—For the selection of institutional cottage supervisors whose qualifications, duties and compensation are outlined, tests are suggested as follows: memory for oral directions; short-answer items on terms, practices and procedure; true-false statements regarding typical situations; education and employment record; oral interview for rating of personal traits. The passing of minimum physical requirements, and a score of 90 on the Army Alpha abstract intelligence test are expected for admission to the balance of the examination. The material is as yet unstandardized.—*K. M. Cowdery* (Stanford).

3273. **Dolezal, J.** *Untersuchungen über die Verwendbarkeit 6stelliger Zahlen für Kraftwagen.* (Studies in the applicability of 6-place numbers for automobiles.) *Psychotechn. Zsch.*, 1927, 2, 148.—Report of the Psychotechnical Institute of the Technical High School, Dresden. With two seconds exposure only 70.5% of the numbers were recognized correctly, with one second exposure only 51%. When the numbers were separated the improvement was only 3%.

The method of writing the numbers in two lines is particularly unfavorable.—*W. Wirth* (Leipzig).

3274. **Fishbein, M., & White, W. A. [Eds.] Why men fail.** New York: Century, 1928. Pp. 346. \$2.00.—W. A. White addresses the book to the average person to aid him in directing his activities toward success. D. A. Thom claims that parents are the cause of certain failures. A. R. Ruggles tells of the factors making for success or failure in the first job. S. E. Jelliffe finds that sex is a bomb in business, and G. K. Pratt describes certain types of wives who help their husbands to fail. K. A. Menninger describes types of queer failures—schizoid characters. Pratt makes the point that both day dreaming and bluffing are attempts to escape from reality and that both are caused by inferiority feelings. Menninger writes a chapter on the depressions of the superior individual. M. Fishbein claims that handicaps can be made an asset, and W. A. White gives copious examples in which so-called handicaps or physical illnesses were merely alibis. A. Meyerson describes cases of failure due to fear. A. M. Mühl names several reasons why women fail, and V. V. Anderson brings out the psychological aspects of job misfits. In the final chapter H. Adler depicts the rôle of the home in the production of misfits.—*E. Swenson* (Clark).

3275. **Hackl, K. Niveauunterschiede von Berufsgruppen bei Lösung des Lückentestes.** (Differences in level of occupational groups in the solution of lacunae tests.) *Psychotechn. Zsch.*, 1927, 2, 146.—In the case of higher officials, stenotypists, metal workers and sales-persons a definite correlation was found between this test and general qualification, but not in the case of other occupations.—*W. Wirth* (Leipzig).

3276. **Klemm, O. Über Pausenwirkung bei hochwertiger geistiger Berufsarbeit.** (The effect of pauses in occupations requiring a high degree of mental activity.) *Psychotechn. Zsch.* 1927, 2, 144.—In the division of plans of a board of works 5 persons were tested by means of the Kraepelin addition method. A regular noon pause with warm luncheon was more favorable than irregular luncheons or professional lectures during the pause.—*W. Wirth* (Leipzig).

3277. **Metcalf, H. C. The psychological foundations of management.** Chicago: Shaw, 1927. Pp. vii + 309. \$6.00.—This book is a collection of lectures given by a group of men who have been concerned for some time with industrial psychology. H. Dennison discusses "Management's and Labor's Interest in Industrial Psychology." In a series of five lectures C. S. Yoakum discusses ways in which fundamental psychological laws are applied to management. There is a rather detailed discussion of the development of habits and attitudes among executives, as well as the direction of impulses and emotions toward better personnel relations with employes. The same principles which have been applied so frequently to increasing efficiency and eliminating friction among employes are now applied to the job of manager. Intelligence, personality, and special abilities are evaluated. Garvey discusses "Continuing Harmonious Relations." He stresses the importance of the first impressions of the new employes, relating an experience of his own in applying for jobs which showed him the other side of the employment counter. H. S. Persons calls attention to "emotional fatigue" which is as important as physical fatigue. Among the eleven listed causes of emotional fatigue are: the technical inadequacy of equipment (e.g., writing with a poor pen), lack of adaptation of the individual to the job, unpleasant contacts, the worker's concern about his livelihood. In discussing "Reaction to Supervision," Pearson says, "First, I believe that the normal attitude of an individual toward work is to do a reasonably good job and that when the attitude is not one of desiring to do a reasonably good job in the manner in which it must be done to make it reasonably good, special factors have entered to distort the normal

attitude of the worker." It is these special factors which are dealt with in the second of his three lectures. The final one has to do with "Reaction to Rewards." "I do not think we have psychological and ethical and economic problems. We have human problems with psychological, ethical, and economic aspects, and as many more as you like, legal often," and "The aim of organization engineering is control through effective unity," M. P. Follett says in introducing the problem "The Psychology of Control." "Unity" is the main theme of the paper. Co-ordination acts reciprocally. It affects both parties. The end product can never be the same if two groups co-ordinate. The *Gestalt* point of view is very evident throughout. "Consent and Participation," "Psychology of Conciliation and Arbitration," and "Leader and Expert" are the other subjects discussed by Follett. "Leadership" is discussed by W. V. Bingham. His definition follows: "Leadership is the organization of the activities of a group for the achievement of a common purpose." "Other things being equal," he says, "that leader is the best leader who has the soundest social and ethical philosophy as a foundation for his thinking." He contends that "leadership" is a group of qualities which are subject to improvement through "conscious, systematic, planned training and development through exercise." E. Mayo discusses organic and mental causes which affect orientation and attention of a worker. In a second article, with the aid of experimental data, he discusses "Mental Hygiene in Industry." The final chapter is by H. A. Overstreet. It is concerned with "Training in Life Management." He applies the main points of the preceding lectures to revised methods of education. There is a selected reading list appended.—*S. M. Shellow* (Milwaukee Elec. Ry. & Lt. Co.).

3278. **Mouvet, E.** *Orientation professionnelle des jeunes gens et des jeunes filles.* (The professional orientation of young men and young women.) Paris: Dunod, 1928. Pp. 250. 20 fr.—A collection of 160 professional monographs. For each monograph there is indicated (1) the enumeration of the medico-physiological aptitudes (with occasional indications relative to orthopedics and the position of work); (2) mental aptitudes, (3) sensorial, (4) character, (5) motor and psycho-motor; (6) indications relative to the minimum of instruction necessary to enter an apprenticeship in a trade, the age of entry into an apprenticeship and its duration; (7) information relative to salary and professional advancement. To these seven sorts of information are added the counter-indications. The first part of the book gives the general information concerning the practice of professional orientation and the manner in which these professional monographs may be of service. At the end of each monograph are given short bibliographical lists when there is space.—*Math. H. Piéron* (Sorbonne).

3279. **Ogata, Y.** *A study of working women.* *Shakai Jigyo Kenkyu* (Studies in social work), 1925, 13, No. 10.—A study of working women in the city of Kobe was made by a questionnaire method. Both employers and employees filled in questionnaires, and the returns were statistically treated. It was unavoidable that the questions were interpreted differently according to individual prejudice, preoccupation, interest, and intelligence, but the following facts were shown: In 34 returns answering the question as to what are the chief desirable characters in women as workers, 17 mentioned obedience; 5, accuracy; 4, politeness; 4, attention to details; 1 each, loyalty, eagerness, diligence, and a few others. In 24 returns answering the question as to what are the chief undesirable characters in women as workers, 7 mentioned the lack of research spirit; 2, the lack of responsibility; 2, the lack of smooth social relation with fellow workers; 1, volubility with the consequence of decreased efficiency; 1, excitability; 1 each, a few others. In 38 returns 26 mentioned that women were undesirable because they quit work too often. In 714 returns from working women, including typists, office girls, telephone operators, sales girls, nurses,

teachers, 42 desired that an educational opportunity should be given them; 147 asked for recreational opportunities; 59 petitioned for a better treatment; 25 wanted better housing; 38 wanted one thing after another. For an educational opportunity, 148 desired establishment of night high schools for girls; 81 wanted vocational schools; 61 wanted night schools for trade and domestic science; 52 desired one specific school after another.—*J. G. Yoshioka* (California).

3280. **Pressman, M. B.** *A review of general literature on industrial accidents, factory management, hours of work, fatigue and rest periods, lighting, heating, ventilation and sanitation, and literature on these subjects in their relation to safety and production.* New York: Library of National Bureau of Casualty and Surety Underwriters, 1928. Pp. 43.—The review is divided into two main parts. Part I is composed of references dealing with accident prevention and production. The sub-headings are: Statistics of Accidents, Economic Losses from Industrial Accidents, Accident Prevention, Definite Achievements of Safety Work in Individual Plants, and Production Statistics. Part II classifies references according to six special factors in accident prevention and increased production. They are: factory management, hours of work, fatigue, lighting, heating, ventilation and sanitation, and health service. Part III is an index to the periodicals and society publications which appear in the bibliography.—*S. M. Shellow* (Milwaukee Elec. Ry. & Lt. Co.).

3281. **Studencki, S. M.** *Psychotechnika a psychologja agólna.* (Psychotechnology and general psychology.) *Polskie arch. psychol.*, 1927, 1, 257-265.—General psychology and psychotechnology are treated as two mutually dependent sciences. The author reviews the contributions each science makes to the other.—*T. M. Abel* (Illinois).

[See also abstracts 3030, 3215, 3333.]

## CHILDHOOD AND ADOLESCENCE

3282. [Anon.] **The nursery school at the Institute of Child Welfare (University of California).** *Parents' Bull.*, 1, April, 1928. Pp. 10.—The Institute of Child Welfare Nursery School at the University of California aims, in addition to benefiting the children, to cooperate with parents, research workers, and interested university students. This bulletin gives the main features, both physical and educational, of the school. The children admitted are between 18 and 36 months of age.—*M. Goodrie* (Clark).

3283. **Croner, E.** *Zur "Psyche der weiblichen Jugend."* (A study of the soul of the young girl.) (4th ed.) Langensalza: Beyer und Mann, 1928.—This book, which is based on practical experience and written in a clear and concise style, presents a survey of the chief types of young girls of all strata of society. The problem of individuality, the young girl and the great human problems (religion, friendship, love, art), the young girl as a sociological being (home and family, school, vocation and state) are treated thoroughly. The final chapter, "Laws of development," contains new psychological points of view for the investigation of the structure of the young girl's soul. The book contains a special bibliography on the psychology of the young girl and adjoining fields.—*E. Croner* (Berlin).

3284. **Fanconi, —.** *Die erzieherischen Aufgaben des Kinderarztes.* (The educational problems of pediatricians.) *Schweiz. med. Woch.*, 1927, 57, 881-885.—This is the report of the opening lecture in a *privat-docent* course in which the author speaks, among other things, of three principal methods which the doctor

has at his disposal: suggestion, hypnosis and psychoanalysis.—*M. R. Lambercier* (Geneva).

3285. **Hartshorne, H., & May, M. A.** *Studies in deceit. Book I. General methods and results. Book II. Statistical methods and results.* New York: Macmillan, 1928. Pp. xxi + 414; ix + 306. \$4.50.—Report of studies carried on during several years by the Character Education Inquiry. Eight types of tests of deceptive behavior were given to some 11,000 pupils, many of the tests being repeated to study reliability. Book I contains a popular presentation of the essential findings supported by 73 tables and 96 figures. Book II furnishes the supporting data and discussion of statistical techniques. These require 178 tables. The deception techniques used have reliability ranging from .24 to .87 with an average above .70. Sex differences are small in most cases, although on all but one of the tests indicating a greater proportion of girls dishonest. Correlations of age and deception averaged .03. Correlation of intelligence and one form of cheating was — .49, which with home background constant became — .40. Physical condition seemed unrelated to deception, yielding a correlation of .20 in one school and — .19 in another. Cheaters made a larger maladjustment score on the Woodworth Questionnaire. Home background and cultural factors yielded correlations with deception as high as — .61. Deception scores of siblings, when intelligence is constant, show correlations of from .22 to .43, and this is almost as high in orphan asylums as in the ordinary population. While variations are large in racio-national groups, those of American, German and Austrian descent were more honest than would have been expected from their intelligence level. Similar slight differences were found among religious groups. School grade differences appear to influence deception in no constant fashion, the correlations ranging from — .13 in one population of 1500 on a lying test to .43 with another population of 2300 on a speed test. The correlation with misgrading and with school attendance and school achievement is usually near zero. Correlations with deportment range from .04 to — .51. Correlation of deception among friends in the same class was .73, whereas correlation of deception among friends not in the same classroom was only .16, and correlation with classmates not friends was .60, indicating the influence of group morale. Sociability seems unrelated to deception, but suggestibility yields a partial correlation, with intelligence constant, as high as .50. A detailed comparison is made of 28 factors in the experience of unusually honest and dishonest children, giving a considerable emphasis to such factors as national group, low intelligence, and poor home background, but little emphasis to health factors, favoritism for other children in the family, being spoiled, etc. Private school children appear definitely more honest than public school children, and cheating where progressive methods were in use was much less than cheating in conventional schools. Appraisal of Sunday schools and two types of school and community character-building agencies indicated that none of these agencies investigated makes a significant contribution to honest behavior as here measured.—*G. B. Watson* (Columbia).

3286. **Johnson, Harriet M.** *Children in the nursery school.* New York: John Day, 1928. Pp. xx + 324. \$3.00.—A report of the work done in the Nursery School of the Bureau of Educational Experiments, associated with the City and Country Day School. There are eight children in the group at any one time; their ages vary from 14 to 36 months. The educational point of view of the school is based on the belief that the early use and control of the large musculature of the body is important. The apparatus is chosen, for the most part, with this in mind: there are slides, kiddie kars, wagons, big blocks, planks, etc. The children are supervised in their use of the environment only when there is a question of their safety. Nothing is taught in the school except what comes

naturally. Conventions are ignored, language activities are not encouraged (there seems to be a relation between precocity in the use of words and retardation in the control of large muscles) except where clearly not forced, music is informal and comes largely from the children in the form of simple rhythmical intonations. An important source of the teachers' estimate of the children is a daily diary-like, closely detailed record of each child's activities. From the numerous records given as illustrative material can be obtained a picture of the life of the school.—*M. Goodrie* (Clark).

3287. **Kupky, O.** *The religious development of adolescents*. New York: Macmillan, 1928. Pp. vii + 138.—The author has attempted to study the religious development of adolescents from diaries, letters, and poems which adolescents have produced, together with results from a supplementary questionnaire given to a certain group of students to determine when religious development begins. Little can be learned from a study of the religion of childhood, as true religious experiences do not ordinarily appear until puberty. The religious community and the temperament of the individual determine whether the development shall be continuous or catastrophic and leading to conversion. Factors such as sex, nature, and love influence religious development, but it cannot be said that the development is exclusively determined by them. Moral, intellectual, and esthetic elements are significant in religious experiences. Illustrations of religious development are scattered throughout the text; an appendix gives further illustrations. A 6 page bibliography.—*M. Goodrie* (Clark).

3288. **Seabury, D.** *Growing into life: a Magna Charta of youth*. New York: Boni & Liveright, 1928. Pp. 715. \$5.00.—The book is divided into 4 parts: the first deals with the moral transition—the changing conditions of life and ethics of the present day; Part 2, with human motives; 3, with neuroses in the making; and 4, with preventive psychology. The book is a plea for the rights of youth and an attempt to show, by constant and copious reference to case histories, how to guide youth. Appended are 20 charts, glossary, bibliography and index.—*E. Swenson* (Clark).

3289. **Stern, E.** *Beitrag zur Psychologie des Stieffkindes*. (Contribution to the psychology of the stepchild.) *Zsch. f. Kinderforsch.*, 1928, 34, 144-157.—The psychology of the stepchild has so far been treated in only two investigations, one by Alice Rühle and another by Fritz Wittels. Stern first reviews the chief points of these authors. According to Rühle, the child is not able to cope with the change of the situation brought about by the entrance of a new person into his environment. Wittels, on the other hand, stresses the disturbance of the libidinous relations to the parents as cause and basis of the changes in the stepchild's character; the Oedipus situation also is supposed to be an important factor. Stern reviews four special cases. He comes to the conclusion that Adler and Freud are to be considered side by side in the interpretation of the various traits. Besides a change of milieu Stern also demands a therapy with abreaction of the blocked emotions and with adjustments to reality through insight into the relationships. The prognosis is good in each case.—*O. Seeling* (Berlin).

3290. **Weill, B. C.** *The behavior of young children of the same family*. Cambridge: Harvard Univ. Press, 1928. Pp. x + 220. \$3.00.—"Does the hypothesis that there is not one environment only for a family, but that there are as many environments as there are individuals in the family, survive the test of case analysis?" "If there are such environmental differences, are they strong enough to cause the observed differences in behavior, or at least the majority of these differences?" The author answers the above questions in the affirmative, basing her conclusions upon case studies of 59 children, of whom 25 were problem cases, derived from 17 families. Part I is devoted to a discussion of the problem of heredity *vs.* environment. Part II discusses the theory and treatment of spe-

cific habits from the point of view of the habit clinic and also presents the detailed case histories. A bibliography of 15 pages.—W. S. Hunter (Clark).

3291. **Zaluzhni, A. S.** *Metodi vivchaknya dityuchogo kolektivu.* (Methods of studying the associations of children.) Kharkov: Knigosnilka, 1926.—The purpose of this book is to place in the hands of the pedologist, the sociologist and the teacher a clear account of the new methods and the new technic which was originally applied to the observation and experimentation with some types of children's associations or collectives. The author treats the problem of collective behavior and calls attention to the genesis of children's collectives. He examines the spontaneous and organized collectives of children of preschool age and of school age and proposes some new methods for their investigation. Among other methods, he proposes new methods for measuring the school group when acting collectively.—E. Muchina (Kharkov).

3292. **Zaluzhni, A. S.** *Formirovanie socialnich navikot u detey preddoshkolnogo vospredstva.* (The formation of social habits in children of preschool age.) Moscow: Ochmatdiet, 1928.—This book may be considered from three angles: (1) It contains the record of the essential steps in the evolution of primitive social habits. (2) It contains material that can be used by the social psychologist and sociologist, when discussing the behavior of children of preschool age. (3) It places in the hand of the educator an account of the new methods of education of preschool children.—E. Muchina (Kharkov).

3293. **Zaluzhni, A. S.** [The individual differences in school working collectives.] *Ukrainski vestnik eksperimentalnoe pedagogiki i refleksologii*, 1927, No. 1 (4), 9-23.—The author has endeavored to answer the following questions in his investigatory work: (1) Whether the pupils of the definite group get their knowledge and skill while learning by the same method; (2) whether the individual differences in the process of learning change, and if so how such changes take place, either for improvement or decrease. The author comes to the following conclusions from the results of his investigations: (1) not all children get knowledge at the same rate while learning through the same method; (2) as the best part of the group, so the worst; that is, children who learn quickly in getting one or the other habit function the same as the children who learn slowly (both groups do not keep this rate constantly); at a definite period of development of this function those who went along very slowly catch up in rate to those who went very quickly and begin to advance to them; (3) the individual differences in this collective with regard to some functions change permanently and regularly; (4) the general tendency of these changes is that at the lower level of development of this function, the individual differences increase, and at the higher level, where the best pupils begin to approach the higher border of this function, the individual differences begin to decrease. Coefficients of correlation between the scores at the beginning of the educational year and at the end are always great.—A. S. Zaluzhni (Kharkov).

3294. **Zaluzhni, A. S.** *Charakter vsaemovidnoshene u ditey pereddoshkhnogo viku.* (The character of the interaction between children of preschool age.) *Ukrainski vestnik eksperimentalnoe pedagogiki i refleksologii*, 1927, No. 2 (5).—The first half year of a child's life is a period of interaction between the child and adults (nurse, etc.). It is in this period that the child develops the simplest forms of social contact. During the second and third half years, one can already observe many forms of interaction between the children themselves. This investigation concerns the behavior of 22 children between 12 and 48 months of age. At this period one observes such forms of conduct as (1) negativism, (2) aggressiveness, (3) the simplest forms of social conduct, and (4) collective be-

havior. The coefficients of the first and second forms decrease, and that of the third and fourth forms increase with age. The coefficient of correlation between age and the social coefficient is  $0.716 \pm 0.076$ .—A. S. Zaluzhni (Kharkov).

[See also abstracts 3035, 3137, 3216, 3307, 3328.]

## EDUCATIONAL PSYCHOLOGY

3295. [Anon.] Thorndike intelligence scores of Columbia College seniors elected to Phi Beta Kappa in 1928. *School & Soc.*, 1928, 28, 10-11.—Individuals who as seniors were eligible to Phi Beta Kappa at Columbia made an average score on the Thorndike Intelligence Test, which they took when they were entering the college as freshmen, that was only a point or two higher than the median score for all students admitted to the school.—H. L. Koch (Texas).

3296. Brownell, H. C. Mental test traits of college cribbers. *School & Soc.*, 1928, 27, 764.—30 students known to have cheated on a final examination at Colgate University were the subjects of the study. In intelligence the group tended to about equal the campus average; in extroversion and psychoneuroticism, to far surpass it.—H. L. Koch (Texas).

3297. Buswell, G. T. Summary of arithmetic investigations (1927). I. *Elem. School J.*, 1928, 28, 702-709.—P. A. Witty (Kansas).

3298. Buswell, G. T. Summary of arithmetic investigations (1927). II. *Elem. School J.*, 1928, 28, 730-743.—P. A. Witty (Kansas).

3299. Carreon, M. L. Comparative study of teachers' ratings and students' test scores in secondary schools. *Philippine Pub. Schools*, 1928, 1, 112-117.—A correlation between teachers' ratings and students' scores on Bureau tests for history,  $.012 \pm .114$ , for English,  $.067 \pm .111$ , and for physics,  $-.063 \pm .128$ . This correlation is derived from school averages.—E. Swenson (Clark).

3300. Cole, L. W. Interference between related mental processes. *J. Educ. Res.*, 1928, 18, 32-39.—In the problem of transfer of training there seems to be agreement regarding the transfer of identical elements. In the present study addition and multiplication and subtraction and division were considered such identical elements. The results of 22 subjects who had five practice periods of 40 minutes each are given. Another group of 26 were given the tests. The results lead to a criticism of Gates' theory of transfer and to an insistence that identity must be defined "by terms less vague than identity of 'attitudes,' 'methods' and 'movements.'" The author finds little evidence that objective and subjective identity are in practice the same thing.—S. W. Fernberger (Pennsylvania).

3301. Collier, J. W. The treatment of secondary schools' admission examination scores. *Forum Educ.*, 1928, 6, 144-150.—On the basis of differences in average scores per month increment of age on tests of arithmetic and English, a correction of score is recommended, amounting in the case of arithmetic to one twentieth, and in the case of English to one twenty-fifth, of the standard deviations of the scores. A zero correction at the median age, deductions per month of age above median, and additions per month of age below median would be made. Such corrections apply to all candidates for admission to secondary schools whose ages fall within the desirable age year. Sigma or standard scores are recommended in combining grades from various tests.—K. M. Cowdry (Stanford).

3302. Fishback, E. H. Character education in the junior high school. New York: Heath, 1928. Pp. xiii + 190. \$1.24.—While it is generally agreed

that character development is the highest achievement of a school, intellectual training has been the aim, and "the assumption has been that character is a by-product that will take care of itself." The author of this book has found that children are in need of training in the formation of right habits and right ideals. Three main purposes have been kept in view: "(1) To sketch briefly the social changes that make school attention to character values necessary. (2) To discuss the aims or objectives of such training. (3) To furnish definite help to the teacher in the classroom." Modern social conditions make it increasingly important that character training should be given in the schools. The objectives of such training are: "(1) opportunities to make use of all the qualities that enter into a fully developed character, (2) the awakening and quickening of the moral judgment, (3) opportunity for the correction of false notions and ideals, (4) appreciation of the importance of right thinking and acting, (5) conduct situations should be emotionalized so that satisfaction results from noble thinking and acting, (6) a knowledge of the accepted ideals of the better class of people, (7) an appreciation of character in others past and present, (8) a voluntary acceptance of the right ideals, and (9) the right habits formed and rationalized so they do not fail in social situations." Moral ideas develop very rapidly at the early adolescent age, and the schools should take advantage of this opportunity to establish proper habits, attitudes and ideals. The author discusses the place of extra-curricular activities, curricular activities, the personality of the teacher, school discipline, and the direct method in such training. "What may be expected from modern character education" is discussed. The final chapter, *Character Education in Action*, presents a course of study used in the Bedford, Indiana, public schools. Questions and bibliography follow each chapter.—*L. M. Harden* (Clark).

3303. **Gray, W. S.** *Summary of reading investigations.* (July 1, 1926, to June 30, 1927.) **II.** *Elem. School J.*, 1928, **28**, 496-511.—*P. A. Witty* (Kansas).

3304. **Gray, W. S.** *Summary of reading investigations.* (July 1, 1926, to June 30, 1927.) **III.** *Elem. School J.*, 1928, **28**, 587-603.—*P. A. Witty* (Kansas).

3305. **Greene, H. A.** *Work-book in educational measurements.* New York: Longmans, Green, 1928. Pp. iv + 156. \$1.80.—45 problems are given in the tabulation of data, finding the common measures of central tendency, the standard deviation, the method of the Pearson correlation coefficient, percentile and quartile ranks, the finding of the reliability and validity of tests, with work in the interpretation of scores and age and grade norms. Data, questions, and minor problems are given under each of the problems to enable the student to carry the work forward by suitable steps, with sufficient repetition to make the principles and methods clear. The work-book is intended to supplement any of the standard elementary texts in measurement. It should find its greatest usefulness in normal schools and undergraduate courses or for a rapid preliminary review in graduate courses.—*H. R. Laslett* (Whitman).

3306. **Grzegorzewska, M.** *Struktura psychiczna czytania wzrokowego i dotykowego. II.* (The psychological structure of visual and tactful reading.) *Polskie arch. psychol.*, 1927, **1**, 107-121.—From the psychological point of view the syncretic perception or the perception of the whole precedes the perception of the parts. This consideration is now being made in teaching the visual perceptions necessary for reading. The child is taught to recognize the appearance of a word as a whole. It is now agreed that in the tactful perceptions necessary to acquiring the Braille system, it is also easier to learn wholes rather than parts. A means should be devised, therefore, of adapting the teaching of the

Braille system to the principle of *Gestalt* rather than to the analytical method of instruction now in vogue.—*T. M. Abel* (Illinois).

3307. **Hildreth, G.** *A survey of problem pupils.* *J. Educ. Res.*, 1928, **18**, 1-14.—Report of surveys made of problem pupils in the Lincoln School of Teachers College, Columbia University. Two surveys were made in April and November. Forms of the questionnaire are given and a number of case studies are briefly reported. The study includes 39 boys and girls in high school and 37 boys and girls in elementary school. Statistical data are given for grades, ages, I. Q.'s, and types of problems. The author pleads for the consideration of more complete data—both family and child's history and physical and mental-clinical data—in the consideration of such cases.—*S. W. Fernberger* (Pennsylvania).

3308. **Hudelson, E. [Ed.]** *Problems of college education: studies in administration, student personnel, curriculum and instruction.* Minneapolis: Univ. Minn. Press, 1928. Pp. xvii + 449. \$3.00.—This volume is a compilation of papers presented at the first Institute on the Problems of College Education, held at the University of Minnesota July 5-17, 1927. The second part, which is devoted to the problem of student personnel, includes several papers of interest to the psychologist, although the emphasis is placed on the administrative phase. These are: Haggerty, M. E., *Student Ability and Its Measurement*; Johnston, J. B., *The Prediction of Student Scholarship*; Johnston, J. B., *The Selection of College Students*; Wilkens, E. H., *The Orientation of the College Student*; Johnston, J. B., *Student Orientation at Minnesota*; Paterson, D. G., *A Program for Student Counselling*; Blanton, S., *Mental Hygiene for College Students*; Rarig, F. M., *Mental Hygiene and Speech Education*; and Chapin, F. S., *The Significance of Extra-Curricular Activities*.—*L. M. Harden* (Clark).

3309. **Immaculata, Sister M.** *A critical study of arithmetic reasoning tests.* *Cath. Univ. Amer. Educ. Res. Bull.*, 1927, **2**, No. 6. Pp. 38.—A theoretical and experimental study of arithmetic achievement tests. 338 children of Grades 4-7 were given the Buckingham, Monroe, Stanford, Otis and Stevenson tests. r's for each with the composite score and with each other individually are given. Contrary to the results obtained by Monroe and by Hunkins and Breed, this study shows the Buckingham Scale to have advantage over the other type of test. Full information as to the author, publisher, price, forms, grades and standardization of these tests is given, also a bibliography of 23 titles.—*L. M. Harden* (Clark).

3310. **Joteyko, J.** *Jedność szkolnictwa ze stanowiska psychologii i potrzeb społecznych. II.* (Unity of instruction from the psychological and social point of view.) *Polskie arch. psychol.*, 1927, **1**, 89-106.—The modern trend of education lies in the psychological organization of instruction. The suggestion is made that in the primary schools (that is, up to the age of 14) the instruction should be general and homogeneous, with no selection on the basis of special aptitudes, vocational and professional. Due consideration is to be given, however, to particular defects and deviations from the norm, as feeble-mindedness, unruliness, or nervousness. As the primary education is terminated, a thorough investigation of each pupil should be made through the administration of intelligence, educational and special aptitude tests, to serve as a guide in advising him as to the type of secondary education he should pursue. A second selective process should take place upon entrance into a secondary or professional school, so that the subject may fit into the particular instruction most suited to his needs. A repetition of this selective process should be made on the termination of secondary education and on the entrance into university life. In this way it is hoped that each individual will be assured a maximum of productivity.—*T. M. Abel* (Illinois).

3311. **Joteyko, J.** *Postulaty szkoły twórczej na prawach struktur psychicznych.* (The postulates of a creative school based upon the laws of psychological structures.) *Polskie arch. psychol.*, 1927, 1, 197-234.—The first section of this article deals with a description of *Gestalt* psychology as it pertains to psychological functions. The second section treats of the possibilities of using *Gestalt* concepts in the educational field in developing the psychological functions to the best of the child's advantage. The author believes that the pedagogy of the present day should be structural, that form or *Gestalt* should be its main emphasis.—*T. M. Abel* (Illinois).

3312. **May, M. A.** *What science offers on character education.* *Relig. Educ.*, 1928, 23, 566-583.—The author describes the methods employed in studying character and summarizes the results of many researches. He touches upon the character defects of the oldest child, effects of parental discord and defective discipline, of playmates, permanency of early habits, attitude of teachers and response to school morale. When character education comes, it will involve a radical reorganization of school activities, for conduct is more related to emotions than to knowledge, and more to specific situations than to traits or faculties.—*J. P. Hylan* (Stoneham, Mass.).

3313. **Miles, W.** *The peep-hole method for observing eye movements in reading.* *J. Gen. Psychol.*, 1928, 1, 373-374.—A hole is made in the middle of the page of copy to be read. Experimenter observes S's eye movements through this hole.—*H. Cason* (Rochester).

3314. **Myers, G. C., & Myers, C. E.** *Finding mistakes versus correct associations in simple number-learning.* *J. Educ. Res.*, 1928, 18, 25-31.—Report of an experiment on 564 elementary school children tested individually. The children were divided into two groups. To one group a test sheet was given with 20 problems, all with wrong answers, in which the children were asked to point out the errors. To the other group a sheet of 20 problems with the correct answers was given. It was discovered that the error-finding group required more time and made more errors than the group given the correct answers. The authors conclude: "To find mistakes some one else has made, however, seems to be a much more interesting exercise, in spite of its demonstrated inferiority, than the study of correct associations."—*S. W. Fernberger* (Pennsylvania).

3315. **Orleans, J. S.** *Public School Achievement Tests.* Bloomington, Ill.: Public School Publishing Co., 1928.—The following tests for Grades 2-8, together with directions and record sheets, are given: Reading, Form I, Arithmetic Computation, Form I, Arithmetic Reasoning, Form I, and Language Usage, Form I.—*L. M. Harden* (Clark).

3316. **Orleans, J. S.** *Public School Achievement Tests. (e.) Spelling. (Sentence dictation.)* Bloomington, Ill.: Publ. School Publ. Co., 1928. \$0.05 each.—This is the first form of a survey spelling test for grades 2 to 8, and is given in the form of a dictation exercise. There is no time limit. Scoring instructions and tentative norms are given.—*D. E. Johannsen* (Clark).

3317. **Orleans, J. S.** *Public School Achievement Tests. (f.) Grammar.* Bloomington, Ill.: Pub. School Publ. Co., 1928. \$0.75 per 100.—A diagnostic test on the fundamentals of grammar for grades 6 to 8, taking up the distinction between clauses and sentences, the adjective forms, parts of speech, and verb forms (voices and tenses). Scoring instructions and tentative norms are given. The time limit is 20 minutes.—*D. E. Johannsen* (Clark).

3318. **Orleans, J. S.** *Public School Achievement Tests. (g.) History.* Bloomington, Ill.: Pub. School Publ. Co., 1928. \$1.00 per 100.—The first form of an American history test for grades 5 to 8, covering the period from the discovery of America to the present. The test is intended for survey and diagnostic purposes. Norms are in preparation. There is a time limit of 35 minutes.—*D. E. Johannsen* (Clark).

3319. **Orleans, J. S. Public School Achievement Tests. (h.) Geography.** Bloomington, Ill.: Pub. School Publ. Co., 1928. \$1.00 per 100.—A diagnostic geography test for grades 4 to 8, with a time limit of 35 minutes. Instructions for scoring are given. Norms are in preparation.—*D. E. Johannsen* (Clark).

3320. **Orleans, J. S., & Sealy, G. A. Public School Achievement Tests. (i.) Nature study.** Bloomington, Ill.: Pub. School Publ. Co., 1928. \$1.00 per 100.—The first form of a diagnostic nature study test for grades 4 to 8. Norms are in preparation. There is a time limit of 20 minutes. Instructions for scoring are given.—*D. E. Johannsen* (Clark).

3321. **Orleans, J. S., & Sealy, G. A. Public School Achievement Tests. (j.) Health.** Bloomington, Ill.: Pub. School Publ. Co., 1928. \$1.00 per 100.—The first form of a health test for diagnostic and remedial purposes, and intended for grades 4 to 8. The norms are in preparation. There is a time limit of 20 minutes. Instructions for scoring are given.—*D. E. Johannsen* (Clark).

3322. **Otto, H. J. Remedial instruction in spelling.** *Elem. School J.* 1928, 28, 743-748.—This article outlines a technique for selecting poor spellers (three-fold measurement) and describes in detail a remedial program used with 24 pupils in Grades 4-8 of the Buffalo Lake, Minnesota, schools. All pupils showed some improvement during the period September, 1926, to June, 1927, and many made significant gains.—*P. A. Witty* (Kansas).

3323. **Paulu, E. M. Differentiated assignments in classroom management.** New York: Heath, 1928. Set, \$2.20.—"Complete equipment necessary to conducting a comprehensive course in classroom management. Two of the forms are for students, and four for teachers": teachers' manual, objective tests (three forms, no data on reliability), scoring tables, class record sheets, students' references and exercises; provision for different grades of ability.—*R. R. Willoughby* (Clark).

3324. **Poley, I. C. Précis Test.** Bloomington, Ill.: Public School Publishing Co., 1927.—The purpose of this test is to test the ability to select salient points and to distinguish meanings. Eight selections of prose or poetry are given, each followed by five summaries, or précis, of the original. The student is instructed to mark with an "R" the correct précis, with "I" those which are inadequate, and with "X" those which are incorrect. A manual and a record sheet are included. Norms are being established.—*L. M. Harden* (Clark).

3325. **Pressey, L. C. Pressey's Diagnostic Tests in the Fundamental Reading Habits.** Bloomington, Ill.: Public School Publishing Co., 1928.—Reading Selections: Mechanics of Reading, Grade 2, Form A, Grades 3-4, Form A, and Grades 5-6, Form A are given with Directions to the Teacher and a score card. Points considered are: (1) Eye fixations, (2) regressions, (3) accuracy of return sweeps (all three by the mirror method), (4) vocalization, and (5) word analysis, a study of the ability to pronounce ten pentasyllabic words. A table gives the lower limit that is considered acceptable for each factor. Suggestions for very simple direct remedial instruction are given.—*L. M. Harden* (Clark).

3326. **Remmers, H. H. A diagnostic and remedial study of potentially and actually failing students at Purdue University.** *Bull. Purdue Univ.*, 1928, 28, No. 12. *Stud. Higher Educ.*, No. 9. Pp. 164.—This is a study of actual results in a diagnosis of reasons for failure in college and in devices for helping students overcome their deficiencies. Approximately 100 men of Purdue University were the basis of the study. The differences between this experimental group and 100 men of a control group are worked out in a multitude of ways and the significant points thrown into relief with all the refinements of statistical analysis. These are shown in 14 figures and 42 tables. There are also 8 chapters of discussion and 2 reprints of the interview form and the master data sheet in use at Purdue. The potentially failing subjects of the experiment were chosen by

means of well-known and reliable psychological and aptitude tests at entrance. There were in addition other tests making possible diagnosis in greater detail. There are in all a battery of twenty objective measurements. The students were followed up with directed study in a study hall. The comparison of grades of those 45 who went to the study hall with a control group who did not show that the higher marks of the study hall group have 86 chances in a hundred of being better. This report includes more data concerning more students than those of Edward F. Jones of the University of Buffalo and Luella Cole Pressey of the Ohio State University. It takes its place with them in showing the intelligent attempts of some college instructors to meet the actual needs of the student who is a potential failure under the "sink or swim" regime of college instruction.—*E. A. Gau* (Ohio State).

3327. Rémy, —, & Simon, Th. **Psychologie et pédagogie expérimentale.** (Psychology and experimental education.) *Bull. Soc. Binet*, 1928, No. 227-228, 135-155.—This paper contains observations on certain tests (labyrinth, Haggerty's questions) and advice on the method of utilizing the results of the tests for the purpose of understanding the child.—*Math. H. Piéron* (Sorbonne).

3328. Shambaugh, C. G., & Shambaugh, O. L. **An association study of the vocabulary of grade children.** *J. Educ. Res.*, 1928, 18, 40-47.—The author attempts to discover those words that hold the most important place in the daily vocabulary of the child of elementary-school age; to examine these words as to their expression of fundamental necessities in the life of the child and to compare these words with ones selected by other methods. The association method was used with a list of 400 stimulus words selected by the authors, arranged in 8 lists of 50 words each. These were given to 50 pupils in each of Grades IV to VIII inclusive selected from 11 elementary schools in California and Oregon. The data show that 4,515 different words appeared in a tabulation of a total frequency of 230,631 words. A number of high frequency words were found which do not appear in Thorndike's list or in Horn's list.—*S. W. Fernberger* (Pennsylvania).

3329. Smith, A. V. **A comparative study of certain tests of achievement in high school chemistry.** *Cath. Univ. Amer. Educ. Res. Bull.*, 1927, 2, No. 5. Pp. 45.—This paper contains a theoretical and practical evaluation of four tests: Powers, Rich, Gerry and Rauth-Foran. A list of chemistry tests and a bibliography of approximately 60 titles is included.—*L. M. Harden* (Clark).

[See also abstracts 3026, 3096, 3153, 3216, 3247, 3269, 3278, 3285, 3286, 3331, 3333, 3338.]

#### BIOMETRY AND STATISTICS

3330. Bathurst, J. E. **A partial correlation schema.** *J. Appl. Psychol.*, 1927, 11, 155-164.—"The writer has devised a schema for solving problems in partial and multiple correlation of the seven and eight variable magnitudes which involves the finding of fewer partial coefficients than any other plan as yet proposed. This plan is a modification and extention of Huffaker's schema for six variables. . . . It is possible to solve a problem involving seven variables in four and one-half hours, after the Zero Order Coefficients have been computed. . . ." —*W. Dennis* (Ohio State).

[See also abstracts 3269, 3336.]

## MENTAL TESTS

3331. Adams, H. F., Furniss, L., & DeBow, L. A. **Personality as revealed by mental test scores and by school grades.** *J. Appl. Psychol.*, 1928, 12, 261-277.—96 university men and women were given a personality test (self ranking and ranking by house mates) and a mental test (Michigan Modification of Army Alpha). Related traits were brought together in separate tables and correlation coefficients obtained for all the data used. The results obtained, which the authors say agree with those of every other investigator of the subject, indicate that "when personality ratings are used as a standard of comparison" school grades are a better measure than mental tests of foresight, dependability, determination, mentality; that school grades measure both mentality and character—"mental tests measure only a quickness of intelligence and do a second rate job . . ."—*M. Goodrie* (Clark).

3332. Arthur, G. **The re-standardization of a point performance scale.** *J. Appl. Psychol.*, 1928, 12, 278-303.—A preliminary report on the standardization of a point performance scale (described in *J. Appl. Psychol.*, December, 1925). The 8 tests of the 1925 scale plus the Porteus Maze Test were used on 1100 children. The materials and procedure of the tests are described in detail. The time for giving the scale varies from 35 to 90 minutes. Tables are presented which contain a combined point scale, values for converting point scores into years and months of mental age, and values for determining the point value of any score. Between Stanford-Binet IQ's of 119 subjects and the IQ's from this scale, the P.E. of measurement was 4.92; between Kuhlmann-Binet IQ's of 76 subjects and their IQ's from this scale, 4.95.—*M. Goodrie* (Clark).

3333. Bureau of Public Personnel Administration Staff. **The scoring reliability of test material in the free answer and short answer forms.** *Pub. Person. Stud.*, 1928, 6, 98-108.—Based on series of independent scorings of three compositions and of a short-answer form test for senior clerk, variations in final scores are analyzed, resulting in the conclusion that variations in scores on a 200-item short answer test with stencils amount to less than 5%, on short-answer material without stencils about 20%, on free answer material (compositions) as high as 55% and likely to be at least 30%. Various reasons for unreliability of scoring in the different types are listed. The use of short-answer form material scored with carefully prepared scoring keys is recommended.—*K. M. Cowdery* (Stanford).

3334. Dearborn, W. F. **Intelligence tests: their significance for school and society.** Boston: Houghton Mifflin, 1928. Pp. xxiv + 346. \$2.50.—As stated in the preface, "the chapters of this book were prepared as a series of eight lectures which were given at the Lowell Institute in Boston in February and March, 1925." . . . "As now published, the lectures remain for the most part essentially as delivered." The chapter headings are as follows: The Rating of Intelligence by Marks and by Tests; Forecasters of Intellectual Development; The Tests of Intelligence; The Nature of Intelligence and the Influence of Schooling, Maturity, and Environment; Intelligence and Achievement in School; Special Abilities and Disabilities; Provisions for the Weak- and Strong-Minded; Intelligence; Schooling, and Behavior; Educational Determinism and Social Policy. No attempt has been made to treat the subject fully or systematically. The purpose of the book as stated by the author is to make a critical examination of the suppositions which underlie intelligence testing. Leading contentions are that "the makers of intelligence tests . . . are envisioning too narrowly what constitutes intelligence and, indeed, education"; that intelligence tests and also formal schooling are too largely verbal; and that intelligence test scores are unsafe indicators of native endowment. It is admitted, however, that

"intelligence quotients tend to remain constant during the greater part of the growth period," and that "intelligence examinations can for some time to come profitably be used in school to set standards for class and group achievement." Tentative classification of individual pupils by mental tests into *x-y-z* ability groups for purposes of instruction is also regarded as warranted. Segregation of exceptionally high IQ's is defended. In regard to the influence of schooling upon intelligence test scores, the author rests his case heavily on the results of Burt and Gordon. He holds that studies of twins have thus far contributed little toward the solution of the nature-nurture problem. Whipple's argument that the correlation between child performance and home environment may be accounted for by the influence of parental endowment in determining home environment is regarded as "fantastic." The policy of the schools and of society should be to "search for opportunities to improve intelligence," especially along other than the usual verbal-academic lines.—*L. M. Terman* (Stanford).

3335. **Flügel, J. C., & Radclyffe, E. J. D.** *The Pressey cross-out test compared with a questionnaire.* *Brit. J. Med. Psychol.*, 1928, 8, 112-131.—Tests I and IV of the Pressey series were given to 22 women and 11 men in a training college in the south of England; questionnaires involving self-estimates on the characteristics supposed to be tested by the Pressey test were also filled out by the same individuals. The average of the correlations between the questionnaire and the Pressey results was in the neighborhood of zero, the highest being .54 for Disgust and the lowest —.87 for Suspicion. The reliability of the average Pressey test was about .7 and that of the corresponding questionnaire division .6. Some suggestive findings on the qualitative side are mentioned.—*R. R. Willoughby* (Clark).

3336. **Kelley, T. L.** *Crossroads in the mind of man; a study of differentiable mental abilities.* Stanford University, Calif.: Stanford Univ. Press, 1928. Pp. vii + 238. \$4.00.—Psychological investigation consists essentially in analysis of mental functioning into its component, independent parts and the study of such parts; hence the need for a comprehensive technique for testing whether proposed mental entities are in fact independent. Spearman's method is an attack on this problem, generalized, criticized and extended in the present study. The central contribution is the derivation of criteria for determining the number of common factors, besides specific factors, necessary to account for a given number of variables, and of methods for allocating to each of such common factors the proportion of the total variance of a test score attributable to it; other incidental contributions are the derivation of the probable error of a mean tetrad, of the most reliable scoring scheme, and of the probable error of the pentad criterion, one of the basic criteria mentioned above. Populations from Grades VII and III and the kindergarten are investigated by means of the techniques developed; fairly stable general factors are found for maturity-heterogeneity, verbal ability, number manipulation, memory, speed, two kinds of spatial manipulation, and an interest factor tentatively called ebullience or vivacity. The published literature is examined from this standpoint, and found roughly confirmatory in so far as it is adequate. The tests used are presented in full, and a bibliography of 75 items appended.—*R. R. Willoughby* (Clark).

3337. **Ko, C. S.** *The nature of intelligence.* (*Chinese*) *Educ. Rev.*, 1927, 19, No. 8. Pp. 13.—(1) What is intelligence? There are three approaches to the nature of intelligence, the introspective or experiential, the behavioristic, and the bond-psychology of Thorndike. Thorndike estimated that bonds for high grade imbeciles are  $15,000 \pm 8,000$ , for normal persons 250,000, and for geniuses from 850,000 to 1,000,000. Among the various definitions of Stern, Terman, Thorndike, Meumann, Sherrington, Haggerty, Buckingham, Peterson, Thurstone, Freeman, Spearman, Ogden, Ebbinghaus, Colvin, and Woodrow, is that of Y. C.

Chang: "Intelligence is the ability to compete with others under identical situations. Brightness is the special ability to excel others under identical situations, the more the persons excelled the brighter, and vice versa. Hence brightness may be measured by the number of persons excelled. Feeble-mindedness is the phenomenon of lagging behind others under identical situations, the more persons one is lagging behind the higher the degree of feeble-mindedness, and vice versa. Hence the location of feeble-mindedness may also be measured by the number of persons excelled." Intelligence is intelligible in the same way that gravitation or electricity is. Franzen's correlational study of 14 intelligence tests yielding a coefficient of .74 proves that there are at least 74% identical elements in all tests. (2) What do intelligence tests measure? That there is always a definite correlation between intelligence and educational tests shows that the two must measure something in common. One study by Chien reveals the fact that while the intercorrelations between three educational tests range from .62 to .64, the correlations between one intelligence test and the same tests ranges only a little wider, namely, from .61 to .88. Another study by Yu showed that the correlations between one intelligence test and five educational tests range from .75 to .79, with the corresponding partial correlations ranging from -.07 to .43. (3) Distribution of intelligence. (4) Development of intelligence. Thorndike places the maximum development of intelligence at 18 years, while Kuhlman and Heinis place it at 16. Letting  $x$  = age,  $A$  = degree of development of one-year old and  $a = A/16$ , the formula of the latter authors is:  $y = A + (A - a) + (A - 2a) + \dots (A - xa)$ . The formula of Descoeudres, Vermeylen, and Ballard is  $V = a - be^{x/d}$ , in which  $a$ ,  $b$ ,  $d$  are all constants; the logarithmic equation being  $Y = B(1 - e^{x/d})$ , which on substituting figures from Vermeylen turns out to be:  $Y = 429(1 - e^{x/6675})$ . The Chinese formula as worked out by Luh, based on 15 intelligence tests on 25,000 school children, is:  $Y = 79 \log(x - 4) - 23.5$ . (5) Constaney of IQ. 21 references are given.—*S. K. Chou (Stanford)*.

3338. **Westenberger, E. J. A study of the influence of physical defects upon intelligence and achievement.** *Cath. Univ. Amer. Educ. Res. Bull.*, 1927, 2, No. 9. Pp. 53.—The author first takes up a general discussion of the problem and reviews, evaluates, and summarizes investigations on the relation of mental and physical development, the prevalence of physical defects among school children, the distribution of defects, and the relation of physical deficiency to mental and scholastic retardation. He gives a summary of Mallory's investigation (*A study of the relation of some physical defects to achievement in the elementary school*. *Peabody. Coll. Teach. Contrib. Educ.*, 1922, No. 9), in which that author concludes that: "Physical defects are directly associated with low scores. Physical defects constitute 'a' cause of retardation. It has been shown that retardation constitutes a cause of backwardness in achievement. Then physical defects both directly and indirectly constitute a cause of backwardness in achievement." Westenberger studied 404 children of Grades 2 to 8, inclusive, in the city of Manitowoc, Wis. In January the children were given the Otis Group Test, Primary and Advanced, Form A; the Stanford Achievement Test, Advanced Form for Grades 4-8, the Primary, Form A, for Grades 2 and 3; and a thorough physical examination. In June Form B of the intelligence and achievement tests was given, and in September Form A was given again. For comparative purposes the children were divided into three groups on the basis of the physical examination: Group A included those children who were not in need of medical attention, Group B included those in need of immediate medical attention, and Group C was composed of children suffering from minor defects. The following measures were listed for each pupil: C. A., M. A., Index of Brightness, E. A., and E. Q. Means and the S. D.'s were ascertained for each grade

in each group; then the differences between the means for each group and the S. D.<sub>diff.</sub> The results do not indicate statistically reliable differences between the groups, either in intelligence scores or in achievement. For further evidence, from Group B was selected Group BB, which was composed of 41 children who had had the proper medical treatment between the January and June tests, and Group BB<sub>1</sub>, an equal number of children, who had not had the prescribed medical attention. Group C was likewise treated. Again results seem to indicate that the elimination of physical defects does not better the subject either in intelligence standing or in achievement. The author, while realizing that "additional evidence is required before the conclusions suggested by these data may be regarded as thoroughly established," concludes: "It is obvious, of course, that very serious defects will handicap a child in learning. Their influence is probably both direct and indirect. But lesser defects do not appear to have any causal connection with poor scholarship. In fact no association of any kind appears in these data between physical health and achievement. Even comparatively serious defects do not necessarily entail poor achievement." A bibliography of 68 titles is given.—*L. M. Harden* (Clark).

[See also abstracts 3153, 3158, 3243, 3253, 3266, 3295.]

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